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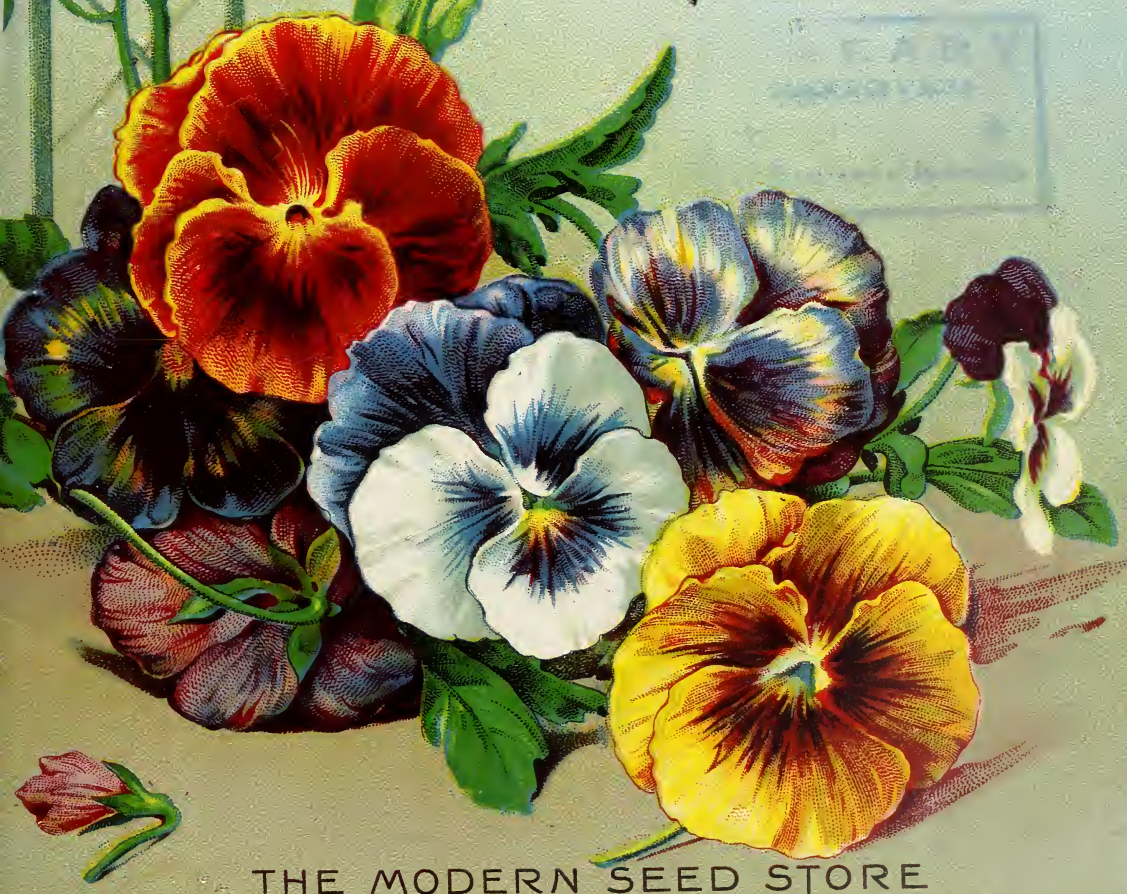
Annual Catalogue

62.67

1915

THE J. CHAS. McCULLOUGH SEED CO.



THE MODERN SEED STORE

The J. Chas. McCullough Seed Co.

230-232 EAST FOURTH ST., CINCINNATI, OHIO.

SUGGESTIONS ABOUT ORDERING.

OUR ORDER SHEET has been arranged in departments and is self-explanatory. Unless customers desire it is not necessary to fill out the names in orders of Vegetables and Flower Seeds and so far as possible we should like orders for sundry items to be made on the second sheet.

SEND YOUR ORDER EARLY so as to have the different seeds on hand as the planting season is ready. A rush of orders all at once, as is so frequently the case, necessarily causes some delay and it will help us and facilitate business if customers would make out their orders early and send them in.

REMITTANCES can be made at our risk on any of the following methods: Post Office Money Order, Express Co. Money Order, Registered Letter, New York or Chicago Exchange or for small amounts postage stamps. **PERSONAL CHECKS** on local banks cost us extra for collection but will be accepted if the customer desires.

ALL PRICES on VEGETABLE SEEDS are net, but on PACKETS, OZS. and ¼ LBS. WE PREPAY POSTAGE. Our packets are large and based on the ounce price.

FLOWER SEEDS IN PACKETS ONLY are subject to discounts as follows:

For 25c remitted select 35c worth.
For 50c " " 75c "
For each dollar " $1.50 "

SEEDS BY MAIL, Etc.

PARCEL POST CHARGES have greatly lowered the cost of sending packages by mail. Most customers are no doubt familiar with charges from Cincinnati and it depends on the weight of the package and the zone. We have estimated as a general average the following rates and these have to be added to prices of bulk seeds if they be sent by mail. **Lb., 5c.; pt., 5c; qt., 10c.** Of course, on larger size packages, especially in the 1st, 2d, and 3d zones they will not average these prices.

DOMESTIC PARCEL POST RATES.

	First Pound (over 8 oz. rates 1 lb.)	Each Additional Pound or fraction.
First Zone within 50 Miles	5c	1c
Second " " 50 to 150 Miles	5c	1c
Third " " 150 to 300 "	6c	2c
Fourth " " 300 to 600 "	7c	4c
Fifth " " 600 to 1000 "	8c	6c
Sixth " " 1000 to 1400 "	9c	8c
Seventh" " 1400 to 1800 "	11c	10c
Eight " all over 1800 Miles	12c	12c

WEIGHTS OF BULK SEEDS in measured quantities are approximately as follows:—

Quarts of Peas and Beans approximately 30 ounces.
Corn, Sugar, approximately, quarts 24 ounces, pints 12 ounces.
Corn, Early and Field, quarts 28 ounces, pints 14 ounces.
Onion Sets, quarts 16 and 20 ounces.

Customers may remit postage for the proper amounts in these zones according to the size of the order.

EXPRESS AND FREIGHT CHARGES on large quantities, of course, are cheaper than Parcel Post. We charge no cartage to depots or the Express Company offices, nor do we charge for boxes, packing or for small muslin bags. Seeds requiring seamless sacks must be remitted for—20c each, extra.

WE DO NOT SHIP ANY GOODS C. O. D. Our prices are plainly printed and if we cannot supply at the prices quoted, we will promptly notify customers. There will be no reasonable doubt that vegetable seeds will be supplied at these prices, although we reserve the right to advance or decline with the market.

ABOUT WARRANTING SEEDS.

We have often been asked if we **"guarantee or warrant our Seeds."** We beg to state plainly, **we do not,** for the reason that practical experience has assured us of the fact that crops may fail, no matter how fresh or pure the seed sown may be. We trust that our customers will fully realize that it is **to our interest** to send **none but the best quality of seeds.**

To secure success, however, it is necessary that the customer should do his part well, or our good seeds will be ruined. With the best of management and good seeds there will be an occasional unaccountable failure. The best of gardeners sometimes fail, and try again with the same seeds with good results.

☞We, The J. Chas. McCullough Seed Co., give no warranty, express or implied, as to description, quality, productiveness or any other matter of any seeds, bulbs, or plants we send out, and we will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms, they are at once to be returned and the amount paid will be refunded. If they are kept it will be taken as proof that they are satisfactory.

FOR CONTENTS SEE PAGE 105.

TO OUR FRIENDS AND CUSTOMERS.

In preparing this Catalogue it has been our aim to give reliable and comprehensive information both as to varieties of seeds, bulbs, plants, etc., and we hope it will be of use to our customers. Our aim is to supply the very best stocks of everything and while we have not used exaggerated descriptions or flamboyant language, customers can rely on our stocks as being the very best obtainable.

Our Garden Seeds are grown on contract especially for us by competent and reliable growers in various sections best suited to their production. From an active and practical experience in the seed business in all its branches for forty-five years, we believe that we are as thoroughly posted and competent to handle the business as any one else in the trade.

We take this opportunity of thanking our many friends and customers for their liberal patronage in the past and beg to solicit a continuance. If we can give information on subjects pertaining to gardening or farming, not mentioned in this catalogue, we shall be pleased to do so on request.

GARDEN SEED AND SALES DEPARTMENT
228-230-232 EAST FOURTH ST.

With best wishes for the New Year and hoping to be favored with your order as early as convenient, we are

Very truly yours,

THE J. CHAS. McCULLOUGH SEED CO.

January 1st, 1915.

Long Distance Telephone—Canal 2603—Connecting All Departments.

THIS CATALOGUE will be mailed free to anyone who is directly interested in gardening and farming. Our customers will confer a favor on us by sending a list of names of their friends and neighbors who would be interested in receiving a catalogue.

MAIN OFFICE, WAREHOUSE AND SEED CLEANING PLANTS
FIFTH, LOCK AND EGGLESTON AVE.

MARKET GARDENERS are requested to send their lists for special quotations. **J. C. McC. SEEDS** are especially suited to them as they are the highest types of the varieties offered. Quotations cheerfully made on any lists that may be submitted.

SCHOOL GARDEN COLLECTIONS.

We are well equipped for supplying these, both in Vegetable and Flower Seeds and will be very glad to quote on any collections or estimates that may be sent us.

If it is desired that we make up selections or collections for these, we will be glad to do so on request.

THE OUTLOOK FOR 1915.

The business world in America has of course been seriously affected by the European War. This, however, is not now as serious as it was some months ago and the country is realizing that business conditions will have to be taken as found.

The War has in many cases put up agricultural products considerably. There have been notable advances in the wheat, corn, oats and food products, while in cotton, tobacco and one or two other commodities, prices have been stagnated.

On the whole, the outlook for the market gardener is very bright. While Potatoes are lower due to large crops both in this country and Europe, with consequent little advance, Onions, Beans, Cabbage and many garden crops are being exported and there is every indication that large quantities of these crops will be sent to Europe next year.

Prospects are very bright for cattle and grain growing farmers. Wheat is higher than it has been for 25 years and meat products of all kinds have advanced.

Some varieties of seed have been seriously affected, and it is very hard at this time to tell what Europe will produce in 1915. American growers are planting larger areas.

Beans this year have turned out to be very short crop. Peas are not as large crop as was first anticipated, and the demand for food stuffs has put up the price on both of these. Many other items are in short supply; some, however, are full crops.

We would advise that early orders be placed for seeds, as there will no doubt be some disappointment due to stocks being sold out.

NOVELTIES AND SPECIALTIES.

We have not listed in this Catalogue a lot of new, untried and high priced novelties in the first leaves of the book. Our complete stocks of Vegetable and Flower Seeds will be found in the body of the Catalogue. Many of them are new and improved varieties. All are of **known and tried merit** and can be relied on to give satisfaction for and according to the description as given.

OUR STOCKS OF FLOWER SEEDS are fresh and reliable. Varieties are selected from the best growers and are of the highest grade. Florists or commercial growers are requested to send us list of their requirements for special prices.

OUR FLOWERING BULBS contain a full and complete list and while there are no high priced novelties offered, those that are offered are of first quality and our prices are very reasonable and are below the average catalogue.

IN THE NURSERY DEPARTMENT we have tried to give graphic and comprehensive information regarding the various trees, plants and shrubs. They have been listed so that the large majority of customers can readily understand what they are getting without too much use of Latin and botanical names.

We strongly advise a larger planting of shrubbery, perennials and trees. Nothing will add to the beauty of the grounds and lawns more than these well selected and grouped. It is an asset to any place and the sooner they are planted more display will be in evidence.

POULTRY SUPPLY DEPARTMENT.

It is a generally recognized fact that the value of the commercial hen today is much greater in dollars and cents than that from the yield of wheat. There is an ever increasing interest taken in this department of suburban and farm life.

We are very large handlers of all Poultry Supplies and make a specialty of many items. Our grinding and cleaning mills, bulking and packing machinery enable us to offer the very best quality of all poultry foods at the lowest market prices and large buyers especially are requested to get prices from us.

In addition, we carry a complete line of poultry appliances, such as Incubators, Brooders and parts thereof; Poultry Exercisers, Dry Food Hoppers, Grit and Shell Boxes and Drinking Founts; in fact all the desirable appurtenances, supplies, etc., that are needed both for commercial and home poultry raising.

A visit to our store, 228-230-232 East Fourth Street will be both a pleasure to us and profitable to our customers.

OUR STORE AND WAREHOUSES.

Retail and Sales Department, 228-230-232 East Fourth St., between Main and Sycamore.

We have the largest and best equipped seed store in Cincinnati or vicinity. The building has about 60 ft. frontage, is 5 stories high, has a good depth and well equipped with modern appliances for careful execution of orders and quick dispatch. We have all modern appliances, our stocks are fresh and reliable and packages are both attractive and descriptive.

Our Warehouse at Fifth, Lock and Eggleston Ave. contains over 125,000 sq. ft. of space. It is 7 stories in height, well equipped with all modern seed cleaning and handling machinery, the best Railroad facilities at our door for loading and unloading in carlots and customers can rely on obtaining the choicest stocks at most reasonable figures.

Flowering Bulbs For Fall Planting.

We import direct from Holland and other foreign countries enormous quantities of the most select Hyacinths, Tulips, Crocus, Narcissus, Snow-Drops, Lilies and other bulbs which are planted out in the fall and which bloom in the winter and very early in the spring.

We have many inquiries for Bulbs in the spring (at the blooming season) and it is impossible to supply these Bulbs at that time. We mention this here with a view of getting customers to anticipate what they want and place their orders for fall delivery. We will on request cheerfully quote prices for next season's delivery.

OUR BULBS are grown by the most careful growers to produce the best results. Last fall we had the finest collection of Hyacinths, Tulips, Crocus and other bulbs which have ever been seen in this City and we hope to have equally as good quality for the fall of 1915.

We suggest if you are contemplating fall planting of Bulbs that you let us have your inquiry for prices now.

We can make more reasonable prices on import orders than if we had to make prices after the bulbs are in. Again customers may depend on receiving just what they want of the very finest quality which has been specially imported for them and if there are any varieties named or rare bulbs that are wanted, they can be supplied at reasonable prices.

OUR FALL CATALOG OF BULBS is issued in August. In case you desire a copy mailed you can send your address now and it will be forwarded at the proper time.

The Chas. McCullough Seed Co.'s "EMERALD" LAWN GRASS SEED

PRICES { 1 PT., 10c.; ½ LB., 15c; 1 QT., 20c; 1 LB., 25c; 5 LBS., $1.00; BUS. (16 LBS.), $3.00; 10 BUS. AND OVER, $2.90 PER BUS.

"EMERALD" LAWN GRASS SEED PRODUCES THE FINEST SHORT GREEN VELVETY LASTING TURF 6 TO 8 WEEKS FROM SOWING. UNDOUBTEDLY THE BEST OF ALL LAWN SEED FOR VARIED SOILS AND LOCATIONS BOTH FOR LARGE OR SMALL AREAS.

EMERALD LAWN GRASS SEED is superior to Kentucky Blue Grass or to any of the high priced mixtures for this section. We have for 40 years made a study of lawns and their care and know from practical experience that no matter what the price or what the claims, J. C. McC. Seed Co.'s EMERALD will give better results, last longer and is undoubtedly the best lawn grass to be obtained.

EMERALD LAWN GRASS SEED is recommended for general lawn purposes, Parks, Cemeteries, Fair Greens, Bowling Greens, Tennis Courts (Sod), Athletic Fields, in fact, anywhere where fine velvety turf is wanted that will withstand hard wear.

QUANTITIES.

FOR NEW LAWNS—1 qt. sows 200 sq. ft. (10 by 20). 1 lb. sows 250 sq. ft. (12 by 20). An acre requires 5 to 6 bushels (80 to 100 lbs.)

FOR OLD LAWNS—It will take about half as much seed as for a new lawn, depending on how thick a stand of grass there is, usually requiring 2 to 3 bushels per acre for renovating.

MAKING LAWNS.

PREPARATION—The soil should be deeply spaded or plowed, thoroughly pulverized and raked fine and smooth, removing all roots, stones, clods, trash, etc. If not properly graded it should be done now, and allow for water to drain off and not stand in pools. If the lawn is made of clay from recent excavations, it should be covered with 3 or 4 inches of good rich garden soil before the seed is sown.

FERTILIZERS—Well rotted stable manure or Pulverized Sheep Manure are thoroughly satisfactory for lawns. Unless the stable manure however, is well decomposed it contains too many weeds, and Sheep Manure is preferable. Peruvian Guano also gives most excellent satisfaction. Quantities required depend on the richness of the soil. If sheep manure is used, 5 to 10 lbs. to 200 sq. ft., and if ground is not rich, 1 ton per acre is not too much.

If Peruvian Guano is used, 1lb. to 60 to 100 square feet, 400 to 500 lbs. per acre will give good results. The Fertilizer had better be worked into the soil at the time the seed is raked in.

SOWING—Seed can be sown either in the spring from February to May or in the fall from August to October. Quantities are given above. It should be put on as evenly as possible and half had better be sown one way, then crossing, sowing the other half at right angles. Covering can be done with a smoothing harrow (if in large areas) or with a hand rake (if in small plots) and rolling with a heavy roller will be decidedly beneficial.

CARE OF LAWNS—All lawns should be cut regularly with a lawn mower. This can commence in the early summer when the grass is about 3 inches high and should be done regularly every week and continue until Fall. The grass however should be allowed to attain a fair height for growing through the winter. Watering in excessively dry weather is beneficial, but too much watering is extremely harmful. A good soaking once a week is sufficient for any lawn and constant sprinkling every day will cause the grass to be burned out by the hot sun.

RENOVATING—If the grass is thin it is not necessary in most cases to plow up the entire lawn and reseed, though if it is choked with weeds and there is very little grass left it is decidedly preferable to plow up or spade up the entire lawn and seed over. Unless this is the case, however, raking over roughly with a sharp tooth rake and sowing more seed, will improve the lawn wonderfully. Grass usually dies out from lack of plant food, hence it is a good plan to apply Peruvian Guano on the surface, say 100 to 200 lbs. per acre as a top dressing. Or use sheep manure at the rate of 400 to 600 lbs. per acre, applied in March, after the growing season has started.

J. CHAS. McCULLOUGH SPECIAL LAWN MIXTURES.

These are prepared for special locations and to suit special conditions. They will be found thoroughly reliable and satisfactory.

J. C. McC. "SHADY NOOK" LAWN GRASS.—For damp situations. Composed of short Perennial evergreen grasses, naturally adapted to damp shady situations such as between buildings or low damp shady places. Per lb., **35c;** 3 lbs., **$1.00;** bu. (16 lbs.), **$4.50.**

J. C. McC. "DRY SHADE" LAWN GRASS—The grasses of which this is composed are short of fair texture Particularly suited for shade under trees having surface roots, such as Maples, Poplars, etc. The plant food and moisture are so effectually exhausted that the top soil is left very barren and dry and liberal amounts of Peruvian Guano or Sheep Manure should be applied in spring and fall. Per lb., **25c;** 5 lbs., **$1.00;** bu. (16 lbs.), **$3.00.**

J. C. McC. HILL SIDE OR TERRACE LAWN GRASS—For high dry situations where moisture and poor soil are conditions to be contended with. It is composed of grases that will succeed fairly well under these conditions and produces short green turf of fair quality. Per lb., **25c;** 5 lbs., **$1.00;** bu. (16 lbs.), **$3.00;** 10 bus. and over, **$2.90** per bu.

J. C. McC. SPECIAL GRASS AND CLOVER SEED MIXTURES.

J. C. McC. SPECIAL MIXTURES FOR GOLF COURSES, POLO GROUNDS, ATHLETIC COURSES AND LAWNS.

We supply in this vicinity nearly all of the cemeteries, public parks, golf courses and other places where considerable quantities of grass seed are used and are prepared to make very reasonable prices for highest quality stocks for golf courses or lawn purposes.

We put up special mixtures for all purposes and will be very glad to estimate on any special mixture that may be required.

We offer the following splendid mixtures which can be relied on to be the very highest quality of stocks and prices are very reasonable.

GOLF COURSE MIXTURES.

It is of course most important that the best seeds be used for this and in proper proportions to produce desired results. New golf courses require somewhat different mixtures from that of old courses because it is imperative in most cases that quick sod should be obtained and one which will be lasting and produce good, green, smooth turf. Our long experience with grasses, we are better posted on the requirements for the average golf course golf course than most of the so called specialists. The fact that we are among the largest importers of grass seeds and one of the largest cleaners of domestic sorts, enables us to offer at very reasonable figures.

J. C. McC. PUTTING GREEN MIXTURE—Composed of short, fine grasses which make smooth, even putting greens. Should be sown 100 lbs. per acre on new grounds or for renovating, the amount should be according to stand of grass.

Per bu. (16 lbs.), **$3.50;** 5 bus. and over, **$3.25.**

FAIR GREEN MIXTURE (For old courses.)—Composed of the best and most permanent grasses which produce short, green, thick turf, not in clumps but of spreading habit. It is the best mixture that is offered in this country.

Bu. (20 lbs.), **$3.00;** 10 bus. and over, **$2.85** per bu. Requires 30 to 40 lbs. per acre according to the stand of grass already on the ground.

J. C. McC. FAIR GREEN MIXTURE (For new courses)—This is composed of grasses which will afford a quick, serviceable turf in a short time. We have sold it for some courses which were sown as late as April 15th and obtained such a good stand in a short time that the club opened and the ground played on July 4th. It will give the very best results in after years. Of course, the course if used too recently after grass is sown will not be in the finest condition but sufficiently good to satisfy players.

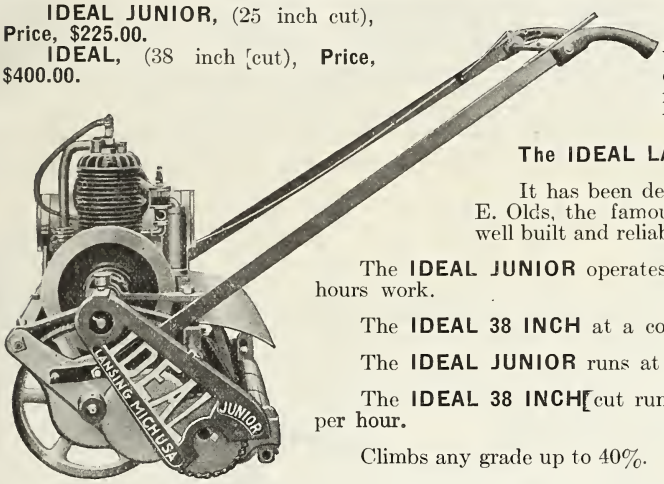
Per bu. (20 lbs.), **$3.00;** 10 bus. and over, **$2.85** per bu.

For a new course, it requires 4 to 6 bus. per acre according to results desired. If for quick results, thick seeding is best.

FERTILIZERS FOR LAWNS—SEE PAGE 91.

IDEAL POWER LAWN MOWERS.

IDEAL JUNIOR, (25 inch cut), **Price, $225.00.**
IDEAL, (38 inch cut), **Price, $400.00.**



This is a 20th century efficiency machine which takes the place of the light hand machine, and the old, antiquated horse-drawn mower. It is so simple and easy to run that the operator enjoys working it.

The IDEAL LAWN MOWER is no experiment.

It has been developed under the careful supervision of R. E. Olds, the famous motor-car designer, which assures us it is well built and reliable.

The **IDEAL JUNIOR** operates at a maximum fuel cost of 20c an hour, 10 hours work.

The **IDEAL 38 INCH** at a cost of 25 to 30c for 10 hours work.

The **IDEAL JUNIOR** runs at a speed and including 4 mile an hour.

The **IDEAL 38 INCH** cut runs at a maximum speed of 3 to 3½ miles per hour.

Climbs any grade up to 40%.

It is easy to turn corners and runs closely and carefully around shrubbery, trees and flower beds.

For a moderate sized place, the **Ideal Jr.** is the best and most satisfactory machine, as it can be operated in spaces almost as well as a hand power machine. For large areas, the **38 inch cut** is just what is wanted. It has a roller attachment which helps smooth the lawn, but does not pack it too hard, as is the case with large automobile mowers, nor does it leave tracks and prints as when a horse mower is used.

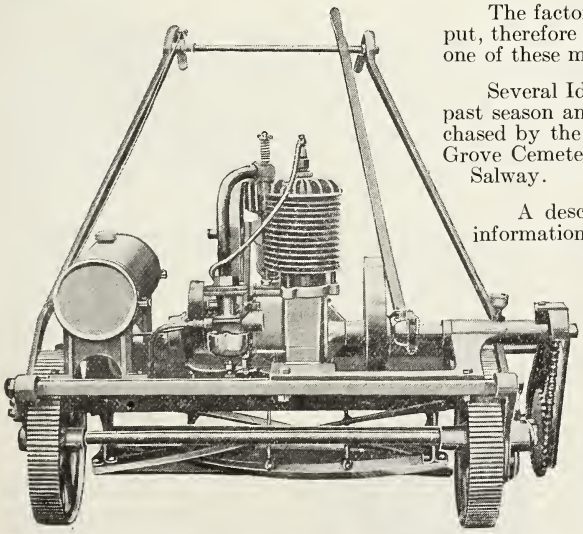
IDEAL Lawn Mowers have been tested out in many parts of the country the past season and have given universal satisfaction. We predict a tremendous sale of them, as they will eventually supersede nearly all horse mowers, as well as the larger types of automobile mowers.

IDEAL LAWN MOWERS are so easily handled that your man would not hesitate to take it out at odd times for half an hour's work.

It is adjustable for cutting grass from ½ to 2 inches high, and the speed can be regulated from ½ to 4 miles an hour.

MOTOR FOR THE IDEAL JR.—Single cylinder, air-cooled, 4 cycle, 3 hp., S. A. E. rating; bore 2¾ inches, stroke 3 inches. High tension magneto; float feed carburetor, expanding band friction clutch.

MOTOR FOR THE IDEAL—Single cylinder, water-cooled, 4-cycle, throttling governor, 5 hp., S. A. E. rating. Bore 3⅝ inches, stroke 4 inches. High tension magneto, expanding friction clutch. Efficient band brake on drum.



The factory up to this time is pretty nearly sold out its output, therefore we would advise parties contemplating purchasing one of these machines to place their order just as early as possible.

Several Ideal Lawn Mowers were purchased in this locality the past season and have given the best satisfaction. One was purchased by the new Cincinnati City Hospital, also by the Spring Grove Cemetery and is endorsed by the Superintendent, Mr. Wm. Salway.

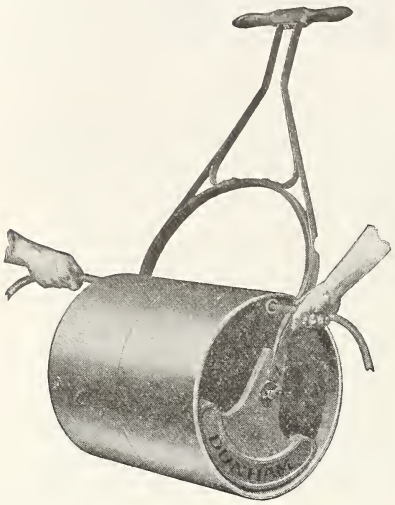
A descriptive, illustrated circular giving further detailed information will be cheerfully sent on request. This machine is on exhibition at our store No. 228, 230 and 232 East Fourth Street and we will be glad to show it at any time.

PRICES.

IDEAL JUNIOR, (25 inch cut), **Price $225.00.**
IDEAL, (38 inch cut), **Price $400.00.**

THE J. CHAS. McCULLOUGH SEED STORE is the largest and best equipped seed house in Cincinnati. Don't forget the location 228-230-232 East Fourth Street between Main and Sycamore, opposite the New Telephone Building.

LAWN ACCESSORIES.



DUNHAM LAWN ROLLER (Roller Bearing.)

Illustrated Descriptive Circular on request.

If you wish a fine lawn, you must use a Lawn Roller. In no other manner can a smooth, compact surface be maintained. It packs the soil, thus retaining the moisture throughout the season, enabling young and tender grass to secure the necessary nourishment. Dunham Lawn Rollers have automobile roller bearing axles and are easier to operate than any other. The only Lawn Roller made with roller vearings, and cost no more than the ordinary rollers.

Dunham Water Weight Rollers are electric welded—no rivets are used—the drum cannot possibly leak.

One or two-section "Water Weight" Rollers, without counter-balancing handle-weights.

No.	Diam. in.	Length in.	Sections	Weight empty lbs.	Weight filled with water, lbs.	Weight filled with sand, lbs.	Price
WB3	14	20	1	60	200	300	$ 9.00
WB5	18	24	1	75	300	500	12.00
WB7	24	24	1	125	500	800	15.00
HW10	18	24	2	160	360	560	15.50
HW12	24	32	2	230	710	1060	20.40

DUNHAM ROLLER BEARING LAWN ROLLER—The rollers are smooth on the face, and finished in aluminum. The outer edges are rounded to avoid cutting the lawn.

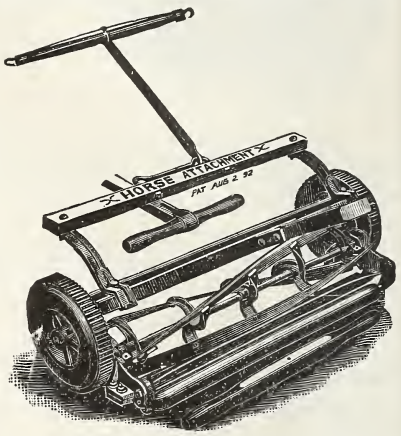
No. 401—2 Section. 16 inches long and 15 inches in diameter, weight 150 lbs...$7.50
No. 404—2 Section. 20 inches long and 20 inches in diameter, weight 250 lbs...$12.00

Prices on other sizes on request.

THE "CHIEF" HORSE LAWN MOWER.

A light running Mower, (30 inch cut) which can be operated readily by hand, or if desired pulled with a horse.

It is sold at a very moderate price, is thoroughly satisfactory and has been used in our principal parks and cemeteries for years. Has 10 inch traction wheels and the draft with the horse is the same as when operated with the handle. Price, complete.....**$17.00**



GENUINE PHILADELPHIA LAWN MOWERS.

The Philadelphia Lawn Mower has stood the test for years, and is acknowledged to be one of the best and a strictly **High Grade Mower.**

Style K—5 blades, 10-in. wheel, 6½-in. cylinder. Single Pinion, geared on both sides. The greatest diameter of cylinder with five blades, insures fine cut, and with its large driving wheels, is light running. 14-in., **$6.25;** 16-in., **$7.00;** 18-in., **$7.50;** 20-in., **$8.25.**

Style C—4 blades, 8½-in. wheel, 5¼-in. cylinder. This style medium high wheel is to supply a demand for a mower, which has real merits, and is light running, durable and easy to handle. 14-in., **$5.25;** 16-in., **$5.75;** 18-in., **$6.50;** 20-in., **$7.25.**

Style M—3 blades, 7-in. wheel, 5¼-in. solid cylinder, with blades bolted on. This is the **original Philadelphia** 1870 pattern mower, and for general purposes is very popular, adapted for rough as well as smooth lawns. 14-in., **$5.25;** 16-in., **$5.75;** 18-in., **$6.50;** 20-in., **$7.25.**

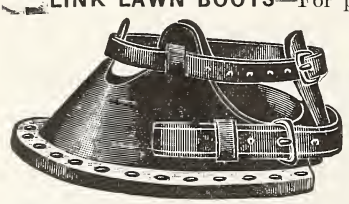
Style E—Width of cut, 21 inches. Has high, 10-in. driving wheel, 4 blades, cylinder 6½ inches. Unlike all other mowers, the driving wheel and cylinder can be removed leaving a solid frame. 21-in., **$10.00.**

We can also supply the **Philadelphia Horse Lawn Mowers.** Prices on application.

GRASS CATCHER.

Fits any Lawn Mower. Made of heavy Duck with galvanized iron. In ordering give the size of mower on which you intend to use the catcher. **75c** each.

LINK LAWN BOOTS—For protecting the grass in cutting with horse mowers. They have been improved until they are today perfect. The sole is hardened, filled with steel rivets and made water proof. The construction is entirely with rivets—no stitching whatever. It is fastened to the horse's foot, not to the ankle, giving free action and no chafing. In ordering mention the width of the widest part of the shoe. Price per set of 4, **$10.00.**



THE "NEW" AND "MONARCH" LAWN MOWERS.

14-inch.....$2.50
16-inch..... 3.00

ROTARY INSECT RIDDERS.

Descriptive Circular on Request.

Made similar to the Brass Fountain Spray illustrated below, except that the cap comes off and allows a tablet to be placed in the center; as the water passes through, this tablet is dissolved, and it contains fungicides and insecticides, which rid the lawn of angleworms, ants, bugs, insects, etc.

Cotton waste can be used instead of the tablet and this can be saturated with Arsenate of Lead, Lime Sulphur Solution, Whale Oil Soap, Linseed Oil Soap, or any chemical desired. It is valuable for spraying low shrubbery, for washing off horses or cattle, or for disinfecting refuse piles and stable manure. Price, each **$3.00.** Price of Extra Ridant's Tablets, **20c.** Ridant's (Liquid Form), 4 ounces size, each, **25c.**

BRASS FOUNTAIN SPRINKLER.

Very simple in construction. Cannot rust or get out of order. Will not injure the lawn. Requires only ordinary pressure of water. Price **75c** each.

GENERAL LIST OF
J. C. McC. SELECT VEGETABLE SEEDS

Postage paid on Seeds at pkt., oz., ¼ lb., and ½ pt. rates. On larger quantities add 5c per pt., 5c per lb., 10c per qt. to prices.

EXPRESS RATES on Seeds, Bulbs, etc. have been considerably reduced in the last few years.

ARTICHOKE.

There are two distinct classes of these.

LARGE GLOBE—Grown for its undeveloped heads, which are cooked like Asparagus and sometimes used as a salad. Half an ounce produces 300 plants sufficient for a good-sized garden. Six ounces per acre.

Culture—Sow in April in rows 15 inches apart and one inch deep, thinning out to four inches and transplanting the following spring to rows 3 feet apart and 2 feet between the plants. In this climate Globe Artichokes require protection with litter or manure during the winter.

LARGE GLOBE—Pkt., 5c; Oz., 25c; ¼ lb., 90c; lb., $3.25.

JERUSALEM (Tubers)—Principally used for stock food and especially valuable for hogs, being very nutritious, and said to prevent hog cholera.

They are excellent also for table use, being boiled like potatoes, and also make excellent pickles.

Jerusalem Artichokes produce large crops and should be more extensively planted. Produce 200 to 300 bushels per acre. One quart cut, plants 60 to 75 feet, 5 to 6 bushels per acre. Plant in rows and cultivate like potatoes, afterwards dig and put in kilns or hogs can be allowed to root them out.

Prices. Qt., 20, (by mail 30c); pk., 65c; bus., $2.00. Special prices to large buyers.

ASPARAGUS.

Should be in every permanent garden, as it is one of the earliest and most delicious of spring vegetables. A good bed will last 15 to 20 years, and as a commercial crop properly attended to, is very profitable, an acre frequently yielding $300.00 annually. One ounce sows 50 ft. producing about 500 plants; 10 lbs. sow one acre. One pound produces plants enough to set one acre.

Roots can be set in February or March, or in the Fall, in October or November.

100 roots plant a bed 100 feet long and is sufficient for a medium garden. An acre requires 4000 to 7000 roots.

CULTURE—Growing Roots—Asparagus seed is sown in March or April one inch deep, in rows fifteen inches apart. Keep clean with hand tools and thin out the plants to four inches apart. When one or two years old, set in permanent beds.

Growing Asparagus—The size of asparagus depends more on high fertilization than on the variety. Well drained, rich soil, where it will not be in the way when the rest of the garden is plowed is best. Two year old roots give quickest results. Plow or dig out a trench 18 inches wide, six to ten inches deep, making the trenches six to eight feet apart. In the bottom of the furrow use four to six inches of well rotted manure, then cover with two or three inches of good soil. The roots are set twelve to fifteen inches apart and should be spread out carefully and afterwards covered with about two inches of soil. Do not cover with too much soil the first year, but the following years they can be hilled up. If white asparagus is wanted the beds should be thrown higher than if wanted for green asparagus.

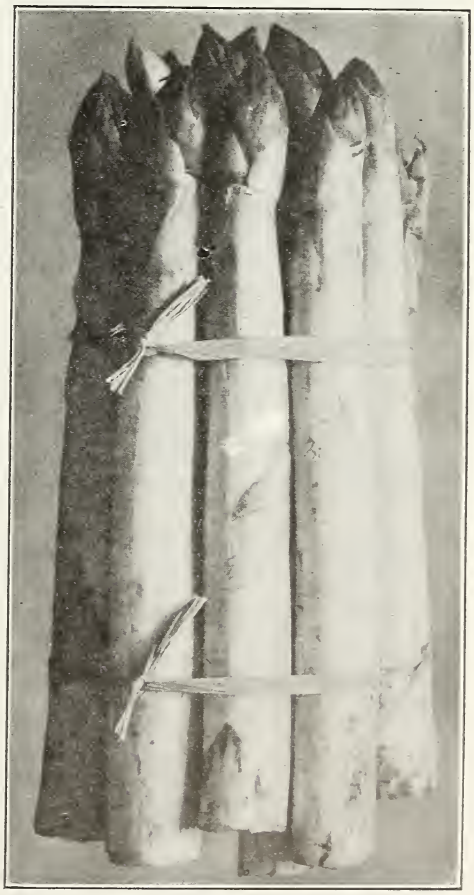
Do not cut asparagus too late in the Spring, as it exhausts the plant. The most practical growers on the day they stop cutting, throw down the beds with a plow, then harrow the ground, leaving the plants to grow. In November the tops are cut off and a mulch of manure put on the top of the rows, which is afterwards worked into the soil, when the beds are thrown up in the Spring.

For a small garden asparagus roots can be set in double rows instead of single.

INSECT REMEDIES—For the asparagus beetle, spray with Arsenate of Lead, 3 lbs. to 50 gallons of water. Or dust with Slug Shot, air slacked Lime or dry Arsenate of Lead, while the dew is on the plant.

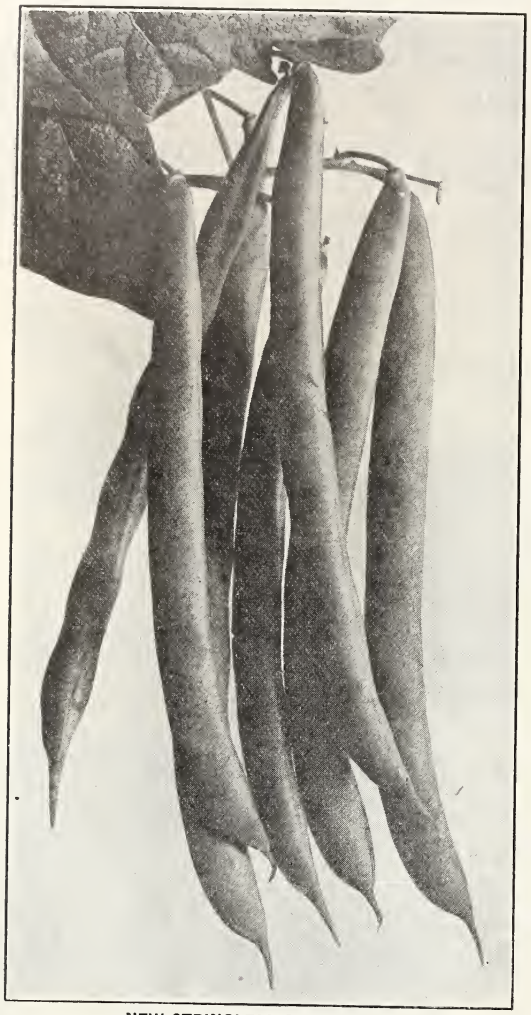
PALMETTO—An early maturing and very prolific variety, producing an abundance of very large deep, green shoots of the best quality. Pkt., **5c**; Oz., **10c**; ¼ lb., **15c**; lb., **50c**; 5 lbs., **40c** lb.

CONOVER'S COLOSSAL—An old favorite, well known sort, producing very large shoots; tips somewhat blunted and slightly tinged with purple. Pkt., **5c**; Oz., **10c**; ¼ lb., **15c**; lb., **40c**; 5 lbs., **35c**.



PALMETTO ASPARAGUS.

ASPARAGUS ROOTS—Strong 2 year old roots, Palmetto, 50 roots, **60c.**; per 100, **$1.00**; per 1000, **$6.50**. Conover's Colossal, 50 roots, **50c.**; per 100, **80c.**; per 1000, **$6.00**.



NEW STRINGLESS GREEN POD

BEANS.

DWARF OR BUSH.

Sometimes called String Beans, Snap Beans, etc.

CROP VERY SHORT.

Always popular and easily grown. If planted about every 2 or three weeks, commencing about April 1st, and continuing until the end of August, a supply will be kept up during the whole summer. For market they are very profitable where cheap labor is to be had. An acre of beans usually produces 75 to 120 bushels which sell for from 50c to $1.50 per bushel.

ONE PINT PLANTS ABOUT 80 FEET. AN ACRE REQUIRES 1 TO 1½ BUSHELS. ½ PINT PLANTED EVERY 3 WEEKS IS SUFFICIENT FOR A MEDIUM GARDEN. THEY ARE READY FOR THE TABLE FROM 40 TO 50 DAYS AFTER PLANTING.

CULTURE—To produce the best results, Beans should have a good soil and deep or thorough tillage before planting and shallow cultivation afterwards to prevent too much disturbing of the roots. Land which was planted in other crops is better than that freshly manured and Peruvian Guano, one or two hundred pounds per acre will give excellent results. For field culture plant in rows 2½ feet apart, dropping the beans 3 or 4 inches apart in the rows, covering about 2 inches with soil. In small gardens rows may be 18 inches apart. Up to the time of blooming, cultivate often, but never while the vines are wet, and do not disturb the roots, especially after blooming, as they will blight and the crop will be reduced. Constant picking extends bearing.

INSECT REMEDIES—For the Bean Leaf Beetle which eats holes in the leaves, or the Blister Beetle, spray with arsenate of lead, 2 lbs. to 50 gallons of water.

For the Bean Aphis or Lice, spray with diluted Kerosene Emulsion or Tobacco extract.

For Fungus diseases and rust, spray with Bordeaux Mixture.

Postage paid on pkts. and ½ pts. On pints remit 5c; on quarts 10c extra if to be sent by mail.

GREEN PODDED VARIETIES.

6 **IMPROVED EARLIEST RED VALENTINE**—A well known very early sort which has been extensively planted for years and there is hardly any variety superior to this, nor one that is more popular for general market or family use. Our strain is very select stock. Pods of medium length about 4½ inches long of medium green color, curved, cylindrical, with crease in the back, very fleshy, crisp and tender. Vines medium to large, erect, with dark green leaves. Seed long, purplish pink, splashed with light buff. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **25c;** 4 qts., **90c;** bu., **$6.75.**

7 **NEW STRINGLESS GREEN POD**—A very handsome long, cylindrical medium maturing green bean. Pods larger than those of the Valentine and straighter. Very fleshy and remain crisp and tender longer. Vines of vigorous growth and productiveness. Seeds oval, light brown in color. A very desirable sort for home gardens and largely grown for market. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **30c;** 4 qts., **$1.00;** bu., **$7.50.**

8 **GIANT STRINGLESS GREEN POD**—A highly productive and very handsome sort. Vines vigorous, spreading. Pods large, round, averaging larger and straighter than the Stringless Green Pod, but a few days later. Seed long, slender, buff color. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **30c;** 4 qts., **$1.00;** bu., **$7.75.**

9 **DWARF HORTICULTURAL**—Very popular in most localities, especially for market, as they are valuable both for snap beans and shelling. They become fit for use as shelled beans early, and in this condition the beans are large, easily shelled and equal to Lima Beans in quality. The vines are very productive, compact and upright in growth, with large leaves. The pods are 5 to 5½ in. long, broad, thick, curved and have splashes of bright red on yellowish green. Seeds large, oval, plump, pale buff splashed with red. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **30c;** 4 qts., **1.00;** bu., **$7.75.**

9A **REFUGEE (late or 1000 to 1).** One of the best sorts for late planting and especially desirable for canning and pickling. The vines are large, spreading, very hardy, with small, smooth light green leaves. The beans are borne in great profusion, pods being about 5 to 5¼ inches long; cylindrical, slightly curved, medium green, afterwards becoming light yellow, slightly splashed with purple. The seed is long, cylindrical, light drab thickly dotted and splashed with purple. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **25c;** 4 qts., **80c;** bu., **$6.50.**

PARCEL POST RATES—To calculate Zone Rates. Beans can be taken at the following rates: A pint weighs approximately 15 oz., a quart approximately 30 oz.; or packed, a pint weighs about 1 lb., a qt. about 2 lbs.

BEANS—Dwarf or Bush Cont'd.

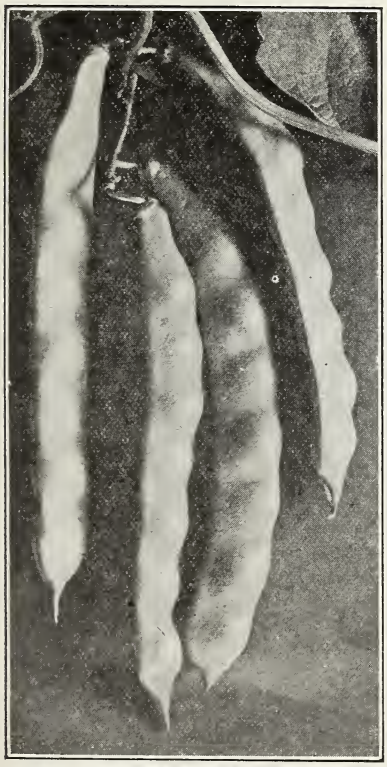
Packets and half pints postage paid. For pints remit 5c, for quarts 10c, if to be sent by mail.

10 **BOUNTIFUL**—An Improved Long Yellow Six Weeks, in that it is earlier, very much larger and more tender. It is very hardy, extremely early, very prolific, and beans continuously for several weeks. Pods are flat, absolutely stringless, rich green, very large and handsome. The seed are yellow, long, resembling Six Weeks. For very early or very late planting is very desirable for both home garden and market. Pkt., **5c**; ½ pt., **10c**; pt., **15c**; qt., **25c**; 4 qts., **90c**; bu., **$7.00.**

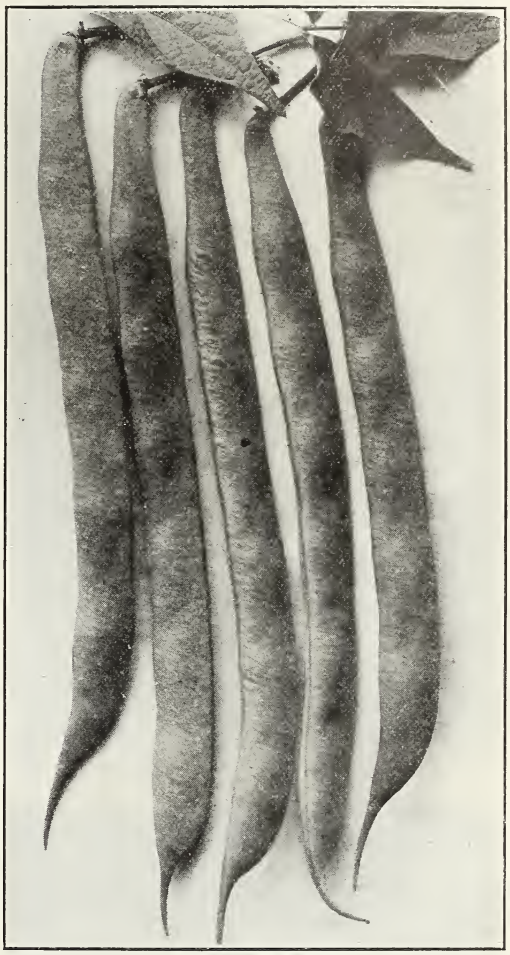
11 **LONG YELLOW SIX WEEKS**—A popular old variety, extra early, producing long flat pods, not stringless, hence is valuable only for earliest planting or late use for pickles. The seed is kidney shaped, large, of yellow color with red circle around the eye. Pkt., **5c**; ½ pt., **10c**; pt., **15c**; qt., **25c**; 4 qts., **85c**; bu., **$6.25.**

12 **ROUND YELLOW SIX WEEKS**—Similar to the Long Yellow Six Weeks in general appearance of vine. The pods are somewhat shorter and more stringless. The seed is medium size, round, light yellow. Pkt., **5c**; ½ pt., **10c**; pt., **15c**; qt., **25c**; 4 qts., **85c**; bu., **$6.25.**

13 **EXTRA EARLY REFUGEE**—Extremely early. Pods light green, slightly curved and about 5 inches long. Excellent for early markets, as it stands shipment well. Vines very prolific, vigorous. Seed, long, cylindrical, drab color, generally covered with purple blotches. Pkt., **5c**; ½ pt., **10c**; pt., **15c**; qt., **25c**; 4 qts., **90c**; bu., **$6.75.**



TENNESSEE GREEN POD



BOUNTIFUL BEANS

14 **TENNESSEE GREEN POD**—A dwarf, early, snap bean, which is very popular in Eastern Tennessee and Southern Kentucky. Seed are brown, a little larger than Kentucky Wonder, very hardy and more capable of withstanding inclement weather than most other sorts. The vines are large, somewhat spreading, prolific. The pods are very long (often 6 to 7 inches), flat, irregular in shape, dark vivid green color, of excellent quality. Recommended only for extremely early planting, as it is not stringless. Pkt., **5c**; ½ pt., **10c**; pt., **15c**; qt., **30c**; 4 qts., **$1.00**; bu., **$7.50.**

DWARF BEANS—For Shelling only.

Usually profitable as a farm crop especially in Northern sections.

CULTURE—Plant in rows about 2½ feet apart. The Navy require about ½ bu. per acre. Other sorts about a bushel.

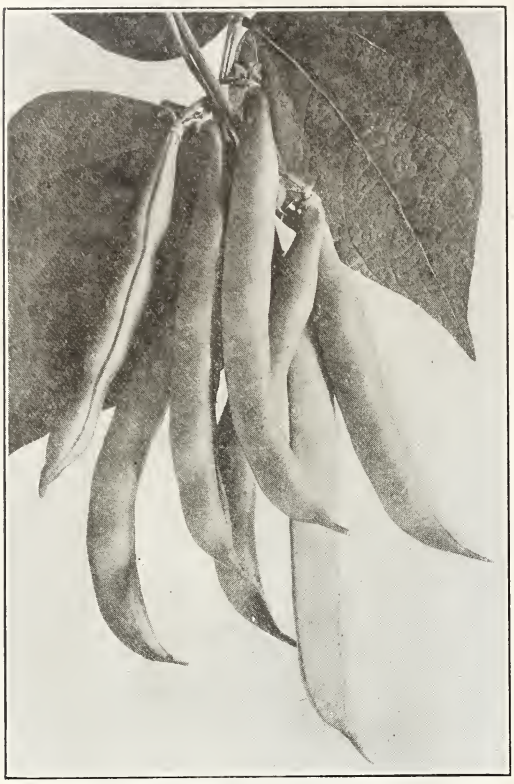
15 **DWARF WHITE NAVY**—The well known small oval white variety so largely used in all sections. Our stock is a specially selected prolific stock. Pkt., **5c**; pt., **10c**; qt., **20c**; 4 qts., **60c**; bu., **$4.00.**

16 **DWARF WHITE MARROW**—Beans oval about double as large as Navy. Vines vigorous and productive. Pkt., **5c**; pt., **15c**; qt., **20c**; 4 qts., **65c**; bu., **$4.50.**

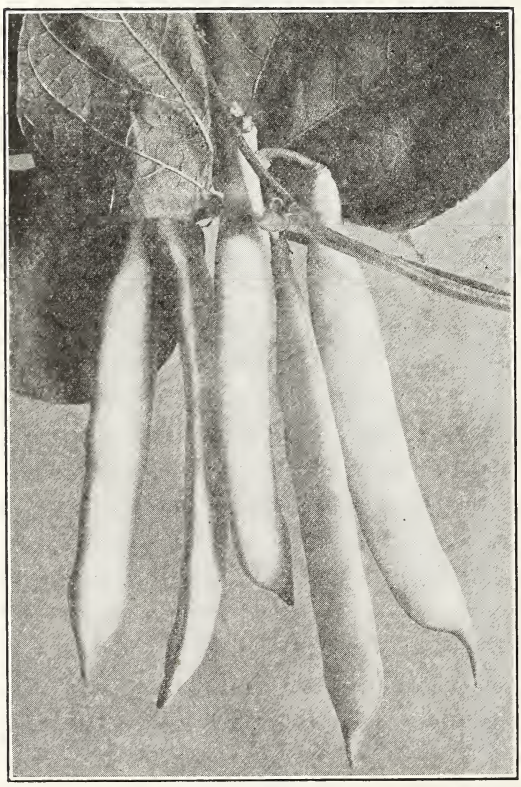
17 **DWARF WHITE KIDNEY**—Large, white kidney shaped slightly flattened. Pods about six inches long, large and coarse. Beans excellent quality, either green or dry. Pkt., **5c**; pt., **10c**; qt., **20c**; 4 qts., **65c**; bu., **$4.50.**

18 **DWARF RED KIDNEY**—Similar to above but dark pink color. Very salable. Pkt., **5c**; pt., **10c**; qt., **20c**; 4 qts., **65c**; bu., **$4.50.**

PARCEL POST RATES.—To calculate Zone Rates; Beans can be taken at the following rates: A pint weighs approximately 15 oz. A quart approximately 30 oz.; or packed, a pint weighs about 1 lb. a quart about 2 lbs.



DWARF GERMAN OR BLACK WAX



DWARF GOLDEN WAX

BEANS—DWARF OR BUSH

WAX PODDED SORTS.

These find ready sale in northern markets, and are largely planted by southern growers for shipping. The pods vary from light to golden yellow color.

Pkts. and ½ pts. mailed at prices. For pints remit 5c, and quarts 10c extra if to be sent by mail.

19 **WARDWELL'S KIDNEY WAX**—A variety which matures a little later than the Golden Wax, yields large crops of long, nearly straight, broad pods of light golden yellow color. They are extremely showy, consequently are ready sale and most profitable for market gardeners and an excellent variety for growing for home gardens. The seed are large, flat, kidney shape, white with dark markings about the eye. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **30c;** 4 qts., **$1.10;** bu., **$8.50.**

20 **DWARF GERMAN OR BLACK WAX**—One of the most popular varieties for home use and market. The pods are about 4½ inches long, slightly curved, round, very brittle and tender. They are very fleshy, clear golden yellow color and remain tender a long time. Seed are long, round, medium size, shiny black. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **30c;** 4 qts., **$1.00;** bu., **$7.50.**

21 **CURRIE'S RUST PROOF WAX**—A variety which is claimed to be absolutely rust proof and we have found it as nearly rust proof as any good Wax Podded sort. The vines are very vigorous, hardy, productive. Pods, light yellow, similar in shape to Golden Wax, 5½ to 6 inches long. Matures early and is a splendid sort for market gardens and excellent for home use. The seed is long, oval, medium size, purplish black. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **30c;** 4 qts., **$1.00;** bu., **$7.50.**

22 **DWARF GOLDEN WAX**—An early maturing variety very productive. Vines erect, compact, bearing the pods well off the ground. Pods nearly straight, broad, flat, golden yellow, very fleshy and wax like, usually 4½ to 5 inches long. Seed medium size, oval, white blotched with purple. A good sort for home garden, either for table use or pickling. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **30c;** 4 qts., **$1.00;** bu., **$7.50.**

23 **DAVIS WHITE WAX**—A very hardy productive variety which is popular with truckers growing for northern markets and market gardeners. The vines are very vigorous and productive. Pods straight, 6½ to 7 inches long, light yellow, and when young are very crisp and tender. The seed is kidney shape, clear white, excellent for baking Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **30c;** 4 qts., **$1.00;** bu., **$7.50.**

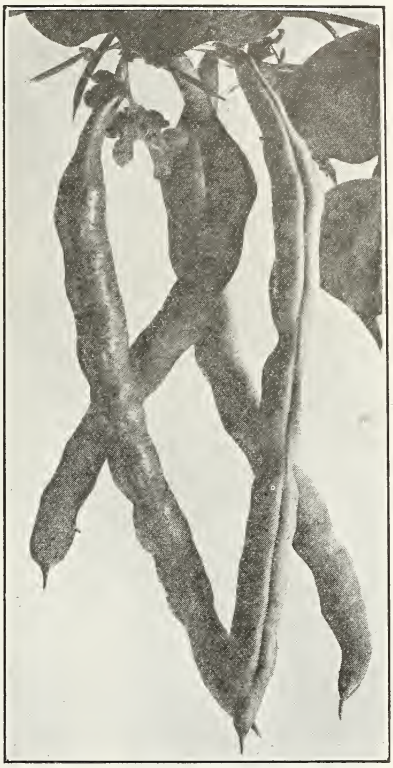
24 **MICHIGAN WHITE WAX**—A splendid variety and one of the earliest Dwarf Wax Beans. Pods are 4½ to 5 inches, long, flat, usually very uniform in size, attractive and of light golden yellow color. An excellent variety both for home use and market gardening and canning. Seed are oval, small, clear white, somewhat resembling the white beans of commerce and are excellent for baking or boiling. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **30c;** 4 qts., **$1.00;** bu., **$7.50.**

POLE OR CORNFIELD BEANS

These are very profitable and usually command good prices on the markets and are more easily and economically gathered than the Dwarf Beans. Can be planted to run up good, strong poles and some varieties are desirable to use on strong growing corn.

Culture—Pole Beans are more sensitive to cold and wet than Dwarf Varieties, hence should not be planted too early. Use poles from 6 to 8 feet long in rows 4 feet apart, placing the poles about 3 feet apart in the row. If the poles are slanted slightly to the north, the vines climb better and the pods are more easily seen. In home gardens three poles are usually placed wigwam style and tied at the top. Around each pole plant 4 to 6 beans from 1 to 2 inches deep. When ready to run, thin to four plants and see that they all climb the same way, as if trained wrong they will not climb. If to be planted in corn, this should be done after the corn is well started and has had two or three workings.

POLE OR CORNFIELD BEANS.



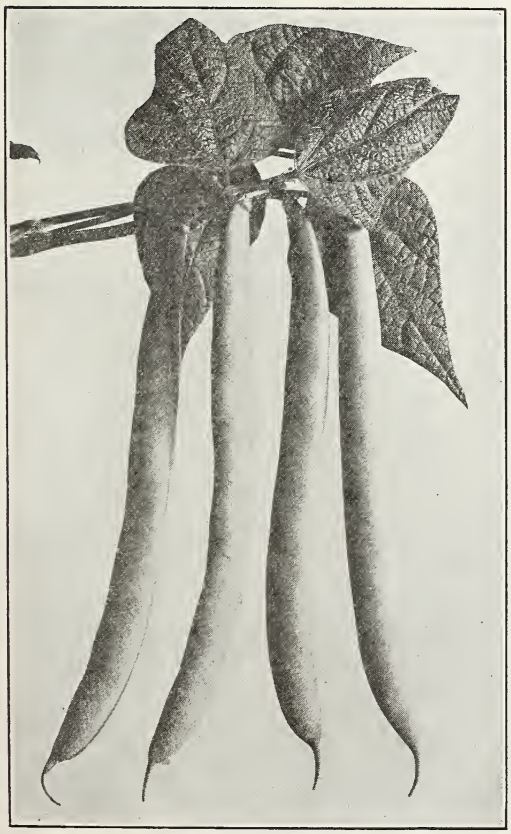
IMPROVED KENTUCKY WONDER POLE BEANS

25 **IMPROVED KENTUCKY WONDER (or Old Homestead)**—A well known variety and one of the most popular of all Pole Beans, especially in the middle sections. The vines are very vigorous, heavy and very prolific, hence not desirable to use for planting in corn. Pods are of irregular shape, bright green, very long, often reaching 9 to 10 inches. They are very tender, crisp and stringless when young, but become irregular and spongy as the beans ripen. The seed is long, oval, slightly flattened and brown or dun colored. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **30c;** 4 qts., **$1.00;** bu., **$7.00**

26 **WHITE SEEDED KENTUCKY WONDER. (St. Louis Perfection White)**—Similar to the above, excepting that the beans are different shape and solid white. It is early maturing, very desirable for snap beans and an excellent variety for green shelling and unsurpassed in quality as baked beans. Very profitable for market gardeners and highly prized in all sections. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **30c;** 4 qts., **$1.00;** bu., **$7.00.**

27 **BLACK SEEDED KENTUCKY WONDER**—Very similar in genral characteristics to the Improved Kentucky Wonder, but even more productive than this well known variety. The pods are not quite as long and a little more regular in shape. It is extremely hardy, very productive and produces good quality snap beans. The seed is oblong, flattened and of jet shiny black color. Crop failed.

28 **RED SPECKLED CUT-SHORT or CORN HILL.** A very popular variety in Central and Southern States especially for planting among corn. It will give a good crop without the use of poles. The vines are not as heavy as Kentucky Wonder, being medium size, vigorous, twining loosely, with dark colored leaves. Pods are 3 to 3½ inches long, straight, flat, fleshy and of good quality. As they mature the pods become light yellow tinged with red, the beans showing distinctly through the pods. The seed are small, round, light greyish white, splotched with purplish brown. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **25c;** 4 qts., **90c;** bu., **$6.50.**



WHITE CREASEBACK

29 **HORTICULTURAL POLE OR SPECKLED CRANBERRY**—A very popular variety for general purposes, either as a late green shelled bean or for snaps. The pods are of medium length 4½ to 5 inches long, broad; when young pale green, gradually changing to yellowish green striped or splashed with red. Vines are moderately vigorous, with large light colored leaves. Can be grown on corn or on short poles. As shelled beans they equal in flavor Limas and are excellent to use as dry beans for boiling or baking. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **25c;** 4 qts., **90c;** bu., **$6.50.**

30 **WHITE CREASEBACK**—An extremely early variety, which produces nearly all its pods at the same time. The vines are medium size and vigorous, and in rich soil wonderfully productive, bearing round, fleshy pods in clusters of from 4 to 12, which makes it extremely easy to gather. Pods are about 5 inches long, comparatively straight, attractive, light green, very fleshy, with a crease down the center. Makes excellent quality snaps and stands shipping well. Beans are small, oblong, clear white. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **25c;** 4 qts., **90c;** bu., **$6.50.**

31 **LAZY WIFE**—A somewhat late maturing variety, bearing medium green pods in large clusters. Pods are 5½ to 6½ inches long, broad, thick fleshy and entirely stringless. When young they have a rich flavor which is retained until they are nearly ripe. An excellent sort for either snap green shelling, or using as dry beans. Seed white, medium size and generally round. Pkt., **5c;** ½ pt., **10c;** pt., **20c;** qt., **35c;** 4 qts., **$1.25;** bu., **$9.00.**

32 **GOLDEN CLUSTER WAX**—One of the best Wax podded pole snap beans. The vines are large, strong growing, vigorous and hardy. Pods 6 to 8 inches long, borne in clusters and vary in color from golden yellow to creamy white. The seeds are medium size, flattened, oval, dull white. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **30c;** 4 qts., **$1.00;** bu., **$7.50.**

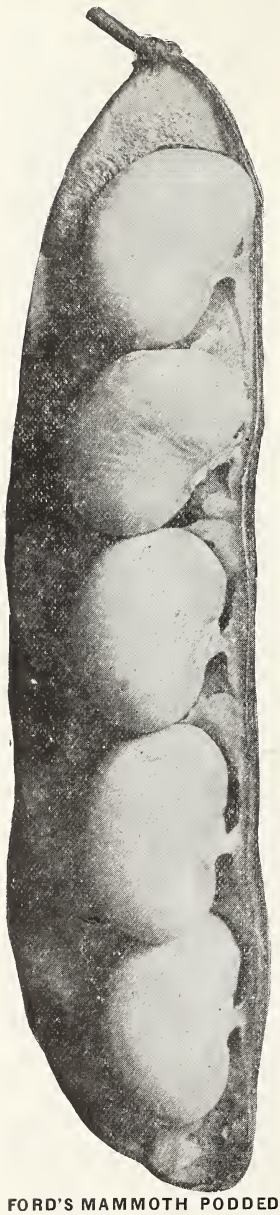
LIMA BEANS

DWARF OR BUSH VARIETIES.

These are preferred in small gardens, as they can be grown like Dwarf Beans, and without the use of poles. They are not quite so prolific as the Pole Limas. but are earlier and continuous bearers throughout the season. The beans can be gathered much easier than the Pole Limas and they can be grown closer together.

CULTURE—All Lima Beans are tender and the ground should be dry and the weather warm and settled before planting. They do best in good light soil, and if not rich, an application of Peruvian Guano or other good fertilizer will be well repaid. Plant in drills 1½ to 2 feet apart, dropping the beans 4 to 5 inches apart and covering about 2 inches deep. Cultivate often until they commence to flower, but only when the leaves are dry.

1 pint of Hend Bush Lima plants 100 to 125 feet and is sufficient for an ordinary garden. 1 quart of other sorts plants about the same space. For succession, make two plantings four weeks apart. Mature in 75 to 90 days from planting.

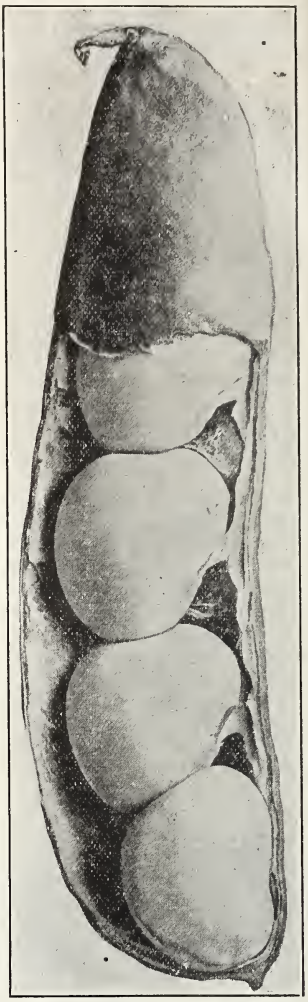


FORD'S MAMMOTH PODDED

35 **FORDHOOK BUSH LIMA**—A very vigorous and erect growing variety, bearing its pods well above the ground in large clusters. Pods are medium green, about 5 inches long and contain 4 to 5 large thick beans of exceptionally fine quality. We consider this one of the best of the large seeded kinds. Pkt., **10c;** ½ pt., **15c;** pt., **25c;** qt., **40c;** 4 qts. **$1.40.**

36 **BURPEE'S BUSH LIMA**—A bush form of the Large White Lima type. Plants are somewhat dwarf but very productive. Pods are medium green, broad, containing 3 to 4 very large flat beans of the best quality. Seed large flat, white, slightly greenish tinge. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **30c;** 4 qts., **$1.00.**

37 **HENDERSON'S BUSH LIMA**—An exceedingly productive variety of dwarf habit. Commences bearing very early and continues to grow and set pods until stopped by frost. The vines are without runners, somewhat dwarf, very productive. Beans small, white and most excellent quality either for green shelling or as dry beans. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **25c;** 4 qts., **90c.**



FORDHOOK BUSH LIMA

POLE LIMA BEANS.

Large seeded sorts require 1 quart to 100 poles, ¾ bu. to an acre. Small Limas require about one-third the quantity.

CULTURE.—These are to be treated like other Pole Beans excepting they should be planted one or two weeks later. Where soil is very stiff, it is best to plant the beans with the eye downward, as they will come up more rapidly.

38 **FORD'S MAMMOTH PODDED**—The result of 20 years' selection by a market gardener near Philadelphia. It far surpasses in size and productiveness many other sorts and has become very popular throughout all sections. Pods are very large, usually containing 4 to 6 beans. Vines vigorous, setting the beans early and very productive. Beans medium size, excellent quality. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **30c;** 4 qts., **$1.00.**

39 **KING OF THE GARDEN**—A favorite sort on account of its large size and abundant yield. The beans are of greenish color, very tender and delicious. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **30c;** 4 qts., **$1.00.**

40 **JERSEY EXTRA EARLY**—An old and very popular sort. Produces large pods which contain 3 to 4 beans. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **30c;** 4 qts., **$1.00.**

41 **LARGE WHITE LIMA**—A well known and popular sort. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **25c;** 4 qts., **90c.**

42 **SMALL LIMA OR BUTTER BEAN**—A very popular sort in the south, and ten days earlier than the Large Lima types. Pods dark green and short, flat, containing 3 to 4 medium or small size beans which are tender and excellent quality. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **25c;** 4 qts., **90c.**

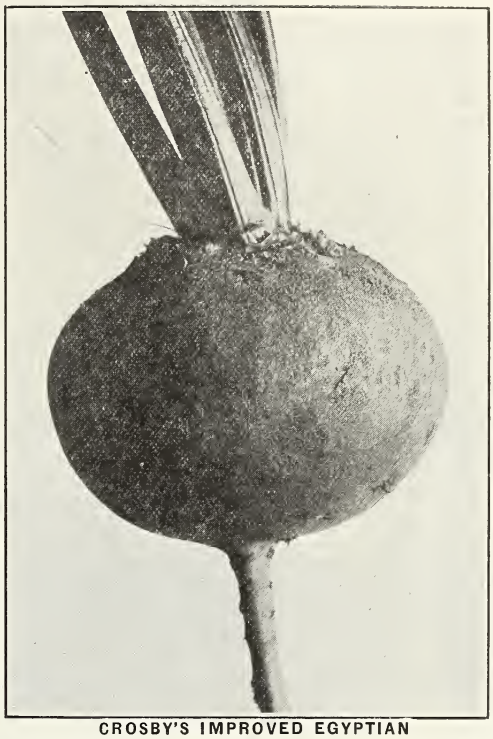
BEET

TABLE VARIETIES.

These are popular in all gardens and as a rule a very profitable crop for market gardeners. Beets fresh from the garden are always more tender and delicious than those that are shipped. They can be sown in succession for different seasons and if too many are produced for table use, make excellent food for poultry and stock.

CULTURE—A deep loamy or sandy soil is best suited to beets. If wanted very early they can be sown in hot beds and transplanted in the open ground when the weather has moderated, but the outer leaves should be trimmed off when transplanting is done. The earliest outdoor sowing is done in March or April, in rows 15 to 18 inches apart, thinning or transplanting the plants to 3 or 4 inches apart in the rows. For winter use, sow in June or July. Roots can be stored in pits or cellars covering with sand to keep from wilting.

One ounce sows 60 feet of drill. 7 lbs. one acre. Ready for use 40 to 75 days after sowing.



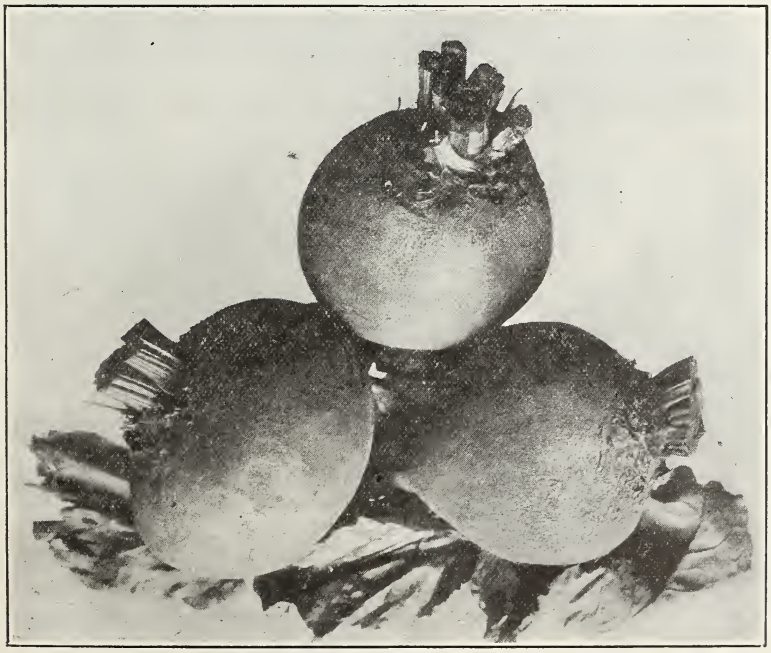
CROSBY'S IMPROVED EGYPTIAN

45 **CROSBY'S IMPROVED EGYPTIAN**—An improved sort which is very popular with market gardeners on account of its quick growth, extreme earliness and general good qualities. The tops are small, roots flattened but slightly globe shaped and very smooth. Exterior bright red and inside deep vermillion red zoned with a lighter shade. It is one of the very best, sweet and tender varieties, of excellent quality and popular, both with the market gardener and for home use. It becomes fit to use earlier than any other variety and is much superior to some of the older sorts. Pkt., **5c**; oz., **10c**; ¼ lb., **25c**; lb., **75c**.

46 **DETROIT DARK RED**—Very early and becomingly popular. Produces medium size globe-shaped roots which are very smooth and of dark blood red color. Very desirable for bunching. Comparison of this with other varieties proves that **Detroit Dark Red** is the most uniform beet in size and most attractive in color. It is splendid for market or home gardens on account of its uniform deep red color and most desirable for canning. Pkt., **5c**; oz., **10c**; ¼ lb., **25c**; lb., **75c**.

47 **EARLY ECLIPSE**—This has long been a popular variety for home gardens and market growing. The tops are small, roots bright deep red, smooth, round or slightly top-shaped with a very small tap root. It is splendid for bunching; is very sweet, crisp and tender, especially when young. Pkt., **5c**; oz., **10c**; ¼ lb., **25c**; lb., **75c**.

48 **EXTRA EARLY EGYPTIAN**—An old well known popular variety which has long been a favorite with market gardeners. It is the earliest sort and largely used for forcing. Has very small tops and produces flat, medium size roots which are very dark red, moderately thick and distinctly flat on the bottom. Flesh is dark, purplish red, firm, crisp and tender. Pkt., **5c**; oz., **10c**; ¼ lb., **25c**; lb., **75c**.



DETROIT DARK RED

49 **EXTRA EARLY BASSANO**—An early quick growing variety which is excellent for table; the leaves are especially adapted for use as greens. Roots are large, very light red and flattened; turnip shaped. Flesh pink, very sweet and tender when young. Called in some localties **Sugar Beet** on account of its sweet taste. Pkt., **5c**; oz., **10c**; ¼ lb., **20c**; lb., **60c**.

50 **EDMOND'S EARLY BLOOD TURNIP**—A dark red, nearly round variety which is slightly flattened. Exterior, dark red; interior, purplish red with a little zoning. Crisp, tender, sweet and one of the best for main crop, being an excellent keeper. Pkt., **5c**; oz., **10c**; ¼ lb. **20c**; lb., **60c**.

BEETS—TABLE VARIETIES CONT'D.

51 **IMPROVED EARLY BLOOD TURNIP**—A selected stock of this old and very popular variety. It is deep red color, zoned with lighter shade; roots round, slightly flattened and excellent for summer and autumn use. Pkt., **5c**; oz., **10c**; ¼ lb., **20c**; lb., **60c.**

52 **BASTIAN'S EARLY TURNIP**—A variety coming in a little later than the Eclipse but produces somewhat larger roots. Tops are medium size; leaves bright green; roots top-shaped, medium size tap. Flesh, light, purplish red, zoned lighter. Pkt., **5c**; oz., **10c**; ¼ lb., **20c**; lb., **60c.**

53 **DEWING'S BLOOD TURNIP**—A medium early sort which is very tender and sweet and a good keeper. Roots are dark purplish red, turnip shape with a medium size tap. Tops medium size; leaf, stem and veins dark red; leaves green. Pkt., **5c**; oz., **10c**; ¼ lb., **20c**; lb., **60c.**

54 **LONG SMOOTH BLOOD**—A splendid late variety producing large, smooth, rather slender roots which grow largely under ground. It has few side roots and is good shape and color, exterior being dark purple, almost black, with delicate red flesh which is tender and sweet. It is an excellent sort for main crop or pickles. Produces very good crops so that it is a profitable grower for stock feeding. Pkt., **5c**; oz., **10c**; ¼ lb., **15c**; lb., **50c.**

55 **SWISS CHARD**—This variety is grown for its tops only which are boiled like spinach. It does not make edible roots but produces white leaves; the stalks can be bunched together and boiled. Makes a splendid summer vegetable and is becoming popular. Known also as the Silver or Spinach Beet. Pkt., **5c**; oz., **10c**; ¼ lb., **25c**; lb., **75c.**

BEETS—FOR STOCK FEEDING.

Too little attention is paid to this important crop for winter feed for stock. They yield enormously, sometimes making fifteen tons to the acre; are very nutritious, not only improving the general condition of stock but greatly increase both the quantity and quality of milk in cows. A variety of feed is always beneficial to all animals and Mangel Wurzel and Sugar Beets afford one of the best crops for this purpose as they are superior in feeding qualities to turnips and are a much larger yielding crop. All farmers and especially stock raisers should grow them extensively.

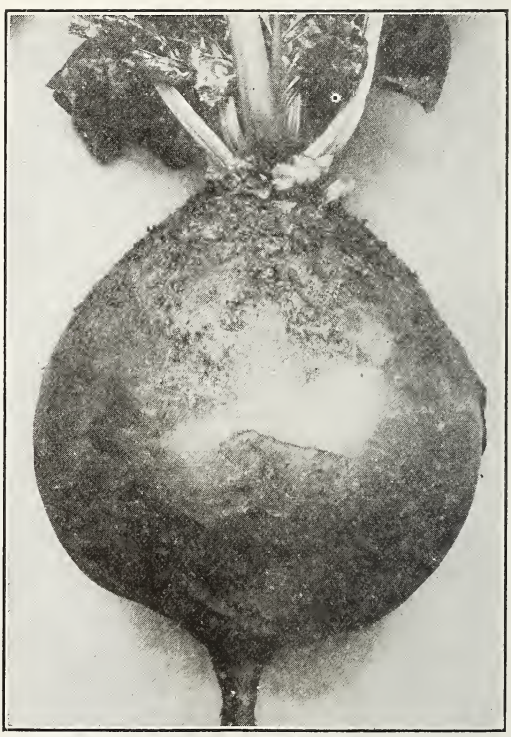
CULTURE—Sow in latter part of April, May or June at the rate of 6 lbs. to the acre, in rows 2½ to 3 ft. apart and thin to 8 inches apart. If the seed is soaked 24 hours before sowing, it germinates more quickly but it should be put in when the ground is moist. The crop is harvested before frost and packed away in barns or cellars. They can also be put into piles or ridges five or six feet high and covered with straw or litter to keep from freezing too much. When the winter weather comes on throw on a layer of four to six inches of earth. A protection of boards to shed heavy rains is also desirable.

57 **MAMMOTH PRIZE RED MANGEL**—Particularly suited to deep soils but succeeds on any medium or heavy soil. The roots are very large, uniform, and are enormously productive. Flesh is white, tinged with red. One of the best for general purposes. Oz., **5c**; ¼ lb., **10c**; lb., **30c**; 5 lb. and over **25c** per lb.

58 **GOLDEN TANKARD MANGEL**—A variety which produces very large roots, oval shaped, the bottom being larger than the top. It is light grey above ground; deep orange yellow below, flesh yellow zoned with white. A splendid sort for shallow soil and produces enormously on rich ground. Oz., **5c**; ¼ lb., **10c**; lb., **30c**; 5 lbs. and over, **25c** per lb.

59 **YELLOW GLOBE MANGEL**—Grows almost entirely above ground and especially desirable for shallow soils. Roots are globe shape, tapering to a tap root and of large size. It is easily pulled and a good variety for general purposes. Oz., **5c**; ¼ lb., **10c**; lb., **30c**; 5 lbs. and over **25c** per lb.

60 **SILESIAN SUGAR**—A splendid variety for stock feeding having large content of sugar which makes it of high nutritious value. Roots light bronze green above ground, greyish white below with white flesh. Can be pulled easily and a good, all around general sort. Oz., **5c**; ¼ lb., **10c**; lb., **30c**; 5 lbs. and over, **25c** per lb.



YELLOW GLOBE MANGEL

61 **LANE'S IMPERIAL SUGAR**—A very popular variety for stock and one which will succeed well in this latitude. The roots grow to a large size and it is more like a Mangel Wurzel in character but the flesh is sweeter and more tender, being finer grained. Especially valuable for poultry. Oz., **5c**; ¼ lb., **10c**; lb., **30c**; 5 lbs. and over, **25c** per lb.

CABBAGE.

FINEST AMERICAN STOCKS.

To raise the best crops of Cabbage, it is of the utmost importance that select seed stock be used. The varieties we list below are saved from the very best stocks and will give excellent satisfaction. We particularly call attention to Copenhagen Market, Charleston Wakefield and J. C. McC. Late Flat Dutch, as being the leading sorts of the types. All home gardens should plant some Savoy Cabbage, as it is so much more delicious in flavor than the ordinary sorts.

JERSEY WAKEFIELD CABBAGE

CULTURE—For earliest plants the seed is sown in hot beds from January to March. To make the best plants, sow early and transplant to cold frames. Then at the end of March or first of April, transplant to the garden, One ounce makes about fifteen hundred good plants. Six ounces makes plants enough for one acre. For summer use sow in the open ground in April and for late use sow in May or June. There is no crop that repays so well, heavy fertilization and constant cultivation. When plants are planted in the field, apply Peruvian Guano either in the drills or around the plant, mixing with the soil.

INSECT REMEDIES—For Flea Beetle, dust with Tobacco Dust, Slug Shot or spray with Kerosene Emulsion or Tobacco Extract. The principal enemy of Cabbage is the cabbage worm for which dust with Slug Shot or Paris Green mixed with Land Plaster at the rate of one pound of Green to 100 lbs. of Land Plaster. For cabbage lice, spray with Kerosene Emulsion or Tobacco Extract.

FUNGUS DISEASES—Cabbage turning yellow is a result of disease usually due to lack of lime in the soil. This is also true of club root. A good application of lime, about 60 to 80 bushels to the acre, is most beneficial to cabbage.

FIRST EARLY SORTS.

65 **EARLY JERSEY WAKEFIELD**—One of the earliest and by far the surest heading of first early cabbages. Most gardeners depend upon it entirely for their extra early crop. It is exceedingly hardy, resists cold and unfavorable conditions and is the most likely to yield satisfactory results. Plants are compact, with erect conical shaped heads and few outer leaves. Stems short; heads of medium size, very solid and of excellent quality. Pkt., **5c;** oz., **20c;** ¼ lb., **60c;** lb., **$2.00.**

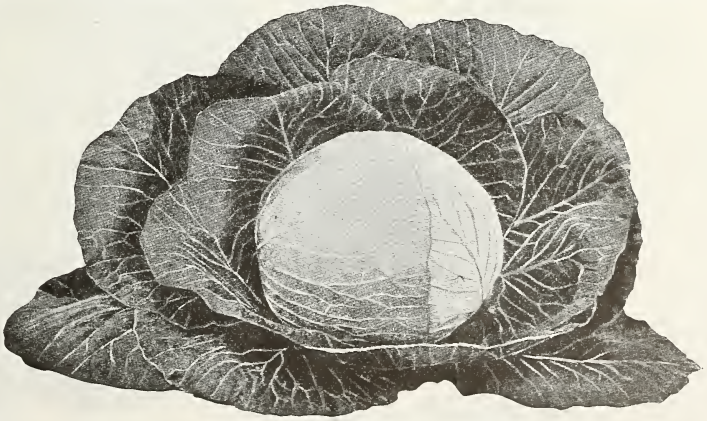
66 **EXTRA EARLY EXPRESS**—An extremely early sharp head or conical sort which is well known and popular in most localities. The heads are smaller than either the Wakefield or Winningstadt but it is a trifle earlier, very compact and excellent for very close planting. Pkt., **5c;** oz., **15c;** ¼ lb., **50c;** lb., **$1.75.**

67 **EARLY WINNINGSTADT**—One of the best conical or sharp heading sorts which is compact and of excellent quality. Quick maturing. It is the hardiest, not only as regards frost but will suffer less from excessive wet, drought, insects or disease than any other sort of its class. Pkt., **5c;** oz., **15c;** ¼ lb., **50c;** lb., **$1.75.**

68 **LARGE or CHARLESTON WAKEFIELD**—An improved strain of Early Jersey Wakefield in that it is much larger though a trifle later. In some localities this is planted exclusively instead of Early Jersey Wakefield as it produces the grower more money. Follows immediately after Early Jersey Wakefield and should be planted by every grower. Pkt., **5c;** oz., **20c;** ¼ lb., **60c;** lb., **$2.00.**

69 **COPENHAGEN MARKET**—The earliest round head or flat cabbage yet introduced. The heads are exceptionally large and it has a very short stem and few outer leaves—a most excellent sort for home gardens and market gardeners. On account of extreme earliness, being almost as quick maturing as Charleston Wakefield, it is destined to become one of the leading sorts grown, as a flat cabbage fills barrels or crates faster than sharp head cabbage and will yield the grower more returns. We predict for Copenhagen Market an extensive cultivation. Our stock of this is from one of the best Denmark growers. Pkt., **5c;** oz., **35c;** ¼ lb., **$1.20;** lb., **$4.00.**

70 **EARLY SPRING**—A flat or round head variety which is popular in most sections. It is not quite as reliable as Copenhagen Market though a little larger in growth. Pkt., **5c;** oz., **20c;** ¼ lb., **60c;** lb., **$2.00.**



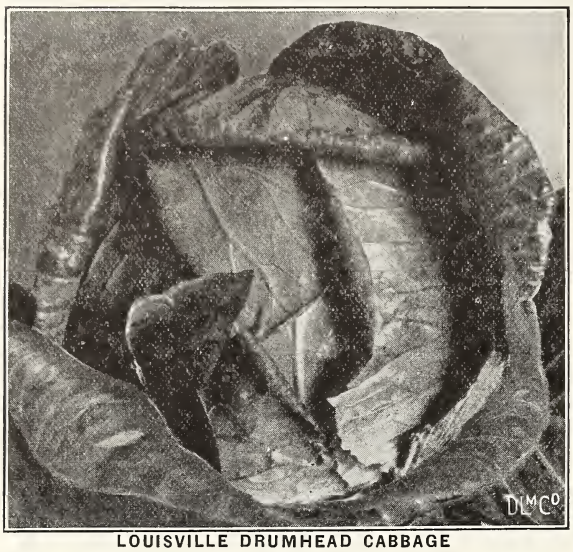
COPENHAGEN MARKET CABBAGE

For Dibbles, Trowels, Etc.
for transplanting Cabbage Plants, see
HORTICULTURAL ACCESORIES.

CABBAGE.

SECOND EARLY VARIETIES.

Pkts., ounces and ¼ lbs. mailed free at prices. Add 5c per lb. if to be sent by mail.



LOUISVILLE DRUMHEAD CABBAGE

72 **LOUISVILLE DRUMHEAD**—One of the most popular of the summer varieties, producing large, round heads which are very solid. It has been largely grown throughout the Central sections, and is much esteemed by market gardeners on account of its general reliable qualities. Our stock of this is extra choice and will give the best satisfaction. Pkt., **5c;** oz., **20c;** ¼ lb., **60c;** lb., **$2.00.**

73 **GLORY OF ENKHUIZEN**—A second early variety which is very sure heading, vigorous growth and general good qualities. The head is globular or very nearly round, very solid and of large size; has spreading outer leaves which are noticeably curved and frilled. Matures about two weeks later than Copenhagen Market and is destined to become one of the most popular of second early sorts. Pkt., **5c;** oz., **25c;** ¼ lb., **75c;** lb., **$2.50.**

74 **ALL SEASONS**—One of the largest and a thoroughly satisfactory second early sort. Plants are vigorous, sure heading; leaves large and smooth. This is a first class sort both for early and late planting and is especially adapted for kraut. It is well adapted to stand the hot sun and adverse conditions. Pkt., **5c;** oz., **15c;** ¼ lb., **45c;** lb., **$1.50.**

75 **EARLY DWARF FLAT DUTCH**—A variety which has long been popular among growers, both for home use and market. The heads are borne on short stems and are very large, solid and nearly flat on the top. Practically nearly every plant will form a good, solid head, which will mature earlier than Late Flat Dutch. Pkt., **5c;** oz., **15c;** ¼ lb., **45c;** lb., **$1.50.**

76 **HENDERSON'S EARLY SUMMER**—An excellent second early Cabbage, which is a vigorous, strong grower, producing moderately large heads. It has rather spreading outer leaves, which are somewhat frilled, and the stem rather short. The heads are round, solid and a trifle earlier than other summer sorts, and in addition will stand longer without bursting than most others. Pkt., **5c;** oz., **20c;** ¼ lb., **50c;** lb., **$1.75.**

77 **ALLHEAD EARLY**—A popular sort which has been much planted in the East and produces good, round heads, similar to Early Summer. Its growth and characteristics are also about the same. Pkt., **5c;** oz., **15c;** ¼ lb., **45c;** lb., **$1.50.**

78 **VOLGA**—A somewhat late variety but a very desirable addition to our list. It produces large, uniformly round heads on short stems; compact growth and matures early for a variety having such a large head. It is exceptionally hardy, a good keeper, not subject to diseases and uniformly satisfactory. Pkt., **5c;** oz., **20c;** ¼ lb., **50c;** lb., **$1.75.**

LATE OR AUTUMN SORTS.

79 **J. C. McC. LATE FLAT DUTCH**—A very superior strain of this well known popular Cabbage, which is exceptionally reliable for main crop planting. It is short stemmed; has rather large early leaves, very showy heads and produces uniformly large, flat, deep solid heads of splendid quality. It is an excellent keeper and can be relied upon as thoroughly satisfactory. Pkt., **5c;** oz., **15c;** ¼ lb., **50c;** bu., **$1.50.**

80 **LARGE LATE DRUMHEAD**—One of the oldest and most popular of late sorts, producing large rounded heads. It has been grown for many years and our stock is an improved stock. The heads are somewhat more globe shaped than the Late Flat Dutch. Leaves large, loose, spreading. An excellent keeper. Pkt., **5c;** oz., **15c;** ¼ lb., **50c;** lb., **$1.50.**

J. C. McC. LATE FLAT DUTCH CABBAGE

CABBAGE—LATE SORTS—CONT'D.

81 **DANISH BALLHEAD OR HOLLANDER**—A variety though introduced but a comparatively short time has become one of the standard sorts in the Cabbage growing district in the north. It produces very large, solid heads, which are globular in shape, has few but rather large, thick, bluish green leaves. Heads are borne on short stems, medium size, round, very solid and stands shipment better than any other late sorts. It is one of the very best keepers and is much desired for kraut. Our stock is Denmark grown and very select. Pkt., **5c**; oz., **25c**; ¼ lb., **75c**; lb., **$2.50.**

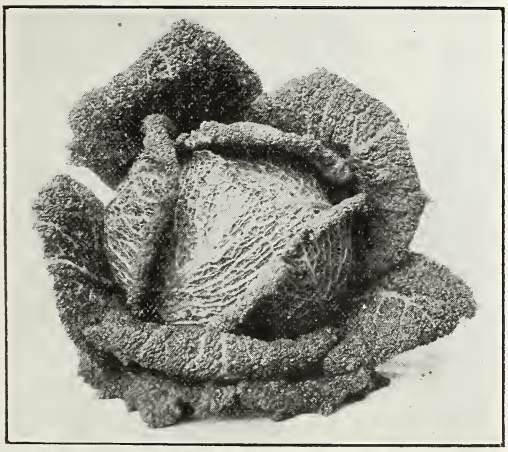
DANISH BALLHEAD CABBAGE

82 **SUREHEAD**—A good, reliable main crop Cabbage, producing very large, thick heads, somewhat flattened but very solid and uniform in size and color. The stem is short, thick. Plants vigorous and a reliable header. Pkt., **5c**; oz., **15c**; ¼ lb., **45c**; lb., **$1.50.**

83 **AMERICAN PERFECTION DRUMHEAD SAVOY**—Too little attention is paid to the Savoy Cabbage in this locality, as for home gardens it is unquestionably the most desirable of all Cabbages. It is used almost entirely for late planting and attains its greatest perfection in flavor after frost, when it becomes as tender and even more delicious than Cauliflower. The heads are of medium size, borne on short stems and not as large as the ordinary Late Cabbage, hence will stand closer planting. Our stock of this is American grown and will produce uniformly large heads for this variety. We strongly recommend it to be more extensively grown both for home use and market. Pkt., **5c**; oz., **20c**; ¼ lb., **60c**; lb., **$2.00.**

84 **RED DUTCH**—A variety used mainly for pickles and sauer-kraut. It is highly esteemed by the Germans. Pkt., **5c**; oz., **15c**; ¼ lb., **45c**; lb., **$1.50.**

CABBAGE PLANTS.



DRUMHEAD SAVOY CABBAGE

We can supply nearby customers with Early and Late Cabbage Plants which we grow especially on our farms.

EARLY VARIETIES—Jersey Wakefield and Louisville Drumhead. Price: 25 for **15c**; **50c** per 100. **$4.00** per 1000.

LATE VARIETIES—Per 100, **30c**; per 1000, **$2.50.**

Special prices in large lots.

BROCCOLI.

A vegetable resembling Cauliflower, but growing a little more coarsely and capable of withstanding extreme cold weather and adverse conditions better. It is planted similar to early Cabbage. Or for late use, sow and treat as for late Cabbage.

INSECT REMEDIES—Same as for Cabbage.

62 **WHITE CAPE**—A large flowering variety with dense, white compact leaves, of excellent quality. Pkt., **10c**; oz., **25c**; ¼ lb., **75c**; lb., **$2.50.**

63 **PURPLE CAPE**—Similar to the above, excepting that the flowers are reddish purple. Very much esteemed by the Europeans for table use and excellent for pickles. Pkt., **10c**; oz., **25c**; ¼ lb., **75c**; lb., **$2.00.**

BRUSSELS SPROUTS.

A vegetable of the Cabbage family, which is largely used in the Fall. It produces stalks about 2 feet high, which are covered with small, miniature heads, resembling small Cabbage. These are cooked and served like Cabbage and are very tender and delicious.

CULTURE—Same as for late Cabbage, but plants are set closer together.

64 **PERFECTION**—A semi-dwarf variety and one of the best. Pkt., **5c**; oz., **15c**; ¼ lb., **40c**; lb., **$1.50.**

BRUSSELS SPROUTS

CARROT.

FINEST FRENCH STOCKS.

An easily grown, useful and most healthful vegetable which should come into more extensive use. In Europe they are extremely popular, and as they add flavor to soups and meats, besides being healthful, delicious and to an extent ornamental, should be more largely used. In addition to their table uses, they make excellent pickles, and any that are left over are nutritious food for all kinds of stock and poultry.

CULTURE—Carrots do best on rich, light, loamy soil, and where the soil is shallow or stiff; select the short growing varieties, rather than the longest rooted sorts. For early crop sow in March; for main crop in April or May, in rows 18 inches apart, cultivating and weeding as soon as the plants are up. Continue in cultivation until maturity. Cover the seed half an inch deep and see that the soil is pressed firmly; thin four to six inches apart.

One ounce sows 100 feet of row. 3 or 4 lbs. per acre. Ready for the table in 40 to 70 days from germination.

CARROT CHANTENAY

86 **FRENCH FORCING**—A short rooted sort which is the earliest variety in cultivation and desirable for forcing or earliest crop. Tops small, roots reddish orange, nearly round when forced and somewhat longer in shape when grown out doors. When fully matured from two to two and a half inches long. Pkt., **5c;** oz., **10c;** ¼ lb., **35c;** lb., **$1.25.**

88 **EARLY SCARLET HORN**—One of the best for early planting out of doors. Roots orange red, about 3 inches long, top shaped tapering abruptly, has small tapering roots matures in about 45 days. Pkt., **5c;** oz., **10c;** ¼ lb., **30c;** lb., **90c.**

89 **OXHEART (or Guerande)**—A short, thick growing variety, especially adapted to stiff or hard soils. Roots four and a half to five inches long, very thick, ending abruptly in a small, tapering root. Flesh bright orange, finest quality, an excellent sort for market home use and fine for stock feeding and poultry. Pkt., **5c;** oz., **10c;** ¼ lb., **35c;** lb., **$1.00.**

90 **CHANTENAY**—A medium early variety, orange red color, crisp and tender. Roots smooth, thick, five and a half to six inches long, uniformly stump rooted but tapering slightly. One of the best in quality and productiveness for either home garden or market and especially desirable for heavy soils, because it can be harvested easily. Pkt., **5c;** oz., **10c;** ¼ lb., **35c;** lb., **$1.00.**

91 **HALF LONG DANVERS**—A deep orange, tender variety, producing roots of medium length, six to eight inches long, tapering uniformly to a blunt point. They are very productive and well adapted to nearly all classes of soil for main crop planting. Pkt., **5c;** oz., **10c;** ¼ lb., **35c;** lb., **$1.00.**

92 **HALF LONG SCARLET**—A handsome variety, producing roots of medium size, slender with small necks. Roots usually five to six inches in length, sometimes longer. A good sort for moderately early planting. Pkt., **5c;** oz., **10c;** ¼ lb., **35c;** lb., **$1.00.**

93 **IMPROVED LONG ORANGE**—A well known popular sort, well adapted for loamy or deep soil, on which are produced very large crops. Roots deep orange color, usually about twelve inches long, three inches in diameter at the crown, tapering to a point. An excellent sort for table use, markets and particularly adapted for stock feeding. Roots tender and of good quality. Pkt., **5c;** oz., **10c;** ¼ lb., **25c;** lb., **75c.**

94 **LARGE WHITE BELGIAN**—Used entirely as a field crop for stock or poultry. Produces enormous creamy white roots three and a half to four inches at the top, tapering to a point. The carrots are among the best of root crops; and we strongly advise more extensive planting of White Belgian. Pkt., **5c;** oz., **10c;** ½ lb., **20c;** lb., **60c.**

CAULIFLOWER.

One of the most delicious vegetables in cultivation but on account of its difficulty in growing, not so general in the average garden as it should be. Any one, however, can be reasonably sure of success if good seed is obtained and cultural instructions given below followed.

CULTURE—For early spring or summer crop sow the seed in January or February in hot beds. When the plants have four leaves transplant to cold frames for development. Towards the end of March or early part of April, set in open field and cultivate the same as cabbage. If the soil gets very dry, water well when possible. When the plants are set in the garden, the ground should be rich; if not so, a little Peruvian guano or well rotted manure should be worked into the soil before the plants are set out. The plants should be thoroughly worked during the growing season and when the heads commence to form, the leaves should be tied over the flowers to protect from the sun and make them white. For fall use, sow at the same time as for late cabbage and treat in the same manner. Cauliflower will not head in very hot weather—hence, for fall use, too early sowing is not desirable.

INSECT REMEDIES—For the cabbage worm, dust with Tobacco Dust or spray with Kerosene Emulsion. For lice, spray with Kerosene Emulsion or Tobacco Extract.

¼ ounce produces about 500 plants. Three ounces will make enough plants to set one acre.

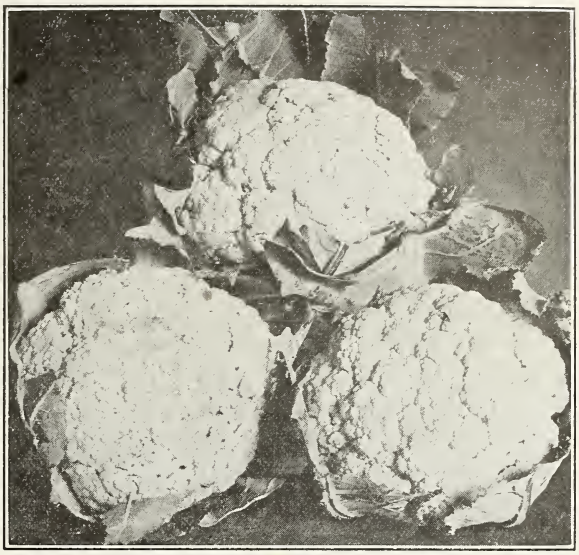
CAULIFLOWER PLANTS SUPPLIED IN SEASON—Prices, **25c** per doz.; **$1.50** per hundred; special prices in large quantities. Varieties, **Earliest Snowball** and **Early Dwarf Erfurt.**

CAULIFLOWER—Cont'd

96 **EARLIEST SNOWBALL**—Unquestionably the earliest maturing strain of short leaf type of Cauliflower. It is well adapted for forcing or winter use for early crop and is one of the most popular of all sorts both for the market gardener and home use. The plants are compact, leaves small, and can be adapted for close planting. . Produces large size flowers pure white, of most escellent quality. Our strain of this is selected Denmark grown and can be relied on as one of the most satisfactory of all. Pkt., **20c**; ¼ oz., **75c**; oz., **$2.75**; ¼ lb., **$10.00**; lb., **$30.00.**

97 **EARLY DWARF ERFURT**—Similar in general characteristics to Early Snowball but not quite so early and somewhat larger in growth. It is especially desirable for field planting for late crop but as a second early crop. Pkt., **15c**; ¼ oz., **60c**; oz., **$2.00**; ¼ lb., **$7.00**; lb., **$22.00.**

98 **DANISH GIANT**—A comparatively new variety which is more heat resisting and has been termed "Dry Weather Cauliflower". It is later maturing than either Snowball or Erfurt but as it withstands adverse weather conditions, is extremely desirable especially for late use. Produces large sized heads; is of more robust growth than other sorts. Pkt., **20c**; ¼ oz., **75c**; oz., **$2.50**; ¼ lb., **$8.00**; lb., **$25.00.**



EARLIEST SNOWBALL CAULIFLOWER

GOLDEN SELF BLANCHING CELERY

CELERY

This is one of the most profitable crops for market gardeners where the acreage is small. It is popularly supposed to be a difficult crop to grow but this is not true if ordinary preparation and care are taken. It requires rich soil, heavy manuring, plenty of water and careful attention. Our cultural instructions are comprehensive but for further practical information we can supply "Celery Culture" by W. R. Beattie. Price **50c** postpaid.

CULTURE—For earliest crop the seed should be sown in hot beds from the middle of February to the end of March. For main crop sow in open ground March or April, according to the weather, in rows 15 inches apart. The seed is sometimes slow to germinate, and in dry and hot weather water well. Careful weeding by hand will have to be done until the young plants get started. Seed sown in beds should be transplanted. When the plants are set in the open field, trim the tops off and put in rows about 5 feet apart, setting plants 6 to 8 inches apart. Cultivate constantly during the growing season, and as the crop matures it must be earthed up or blanched. Sometimes this is done by placing two boards upright, close to the plants and filling in dirt both on the sides and in between the plants. The stalks are handled by hand but the soil must not be allowed to get in the center. Sometimes, Celery is set in beds about 4 feet wide, 6 inches between plants and 12 inches between rows, the earth being thrown out on each side of the bed. Then as it grows it is earthed in for blanching. A new method of growing Celery, which is sometimes used, is to plant a plot completely over, setting plants about 6 inches apart. This enormous growth shades the young stalks so that they turn white but it requires exceedingly rich, heavily manured soil, deep and well drained and plenty of water for irrigation. An ounce sown in about 100 feet produces 5 to 8000 plants. 4 to 6 ounces produce plants enough to set one acre, which mature in 120 to 150 days according to the kind and location.

100 **IMPROVED WHITE PLUME**—An extra early and very handsome sort which is very popular with market gardeners, especially for very early crop. Leaves are light, bright green at the base, shading nearly white at the tip. As plants mature the inner stem and leaves turn white and consequently require less earthing and blanching before they are in condition to use or market. While it is very attractive and the earliest sort, its quality is not nearly so good as that of most other varieties, being somewhat stringy and not so tender. Pkt., **5c**; ½ oz., **15c**; oz., **25c**; ¼ lb., **75c**; lb., **$2.50.**

101 **GOLDEN SELF BLANCHING**—This is not only a very early variety but one of the best for home use or market. It is not quite so early as White Plume but so much finer quality that it is generally preferred as a main crop sort. Plants are medium size, compact and stocky with yellowish green foliage. As they mature the inner stem turns a beautiful yellow golden color and blanching is early accomplished. Being of handsome color, very crisp, tender, free from stringiness and of fine flavor, it is the leading sort grown. Pkt., **10c**; ½ oz., **20c**; oz., **35c**; ¼ lb., **$1.00**; lb., **$3.50.**

CELERY—Cont'd.

102 **GIANT PASCAL**—A green leafed variety of the Golden Self Blanching type, from which it was developed, and one of the best for fall and early winter use. It blanches a beautiful yellowish white, is very solid and crisp and has a fine nutty flavor. Stalks of medium height, thick, solid, flattening towards the base and one of the best for main or late planting. Pkt., **5c**; oz., **20c**; ¼ lb., **60c**; lb., **$2.00.**

103 **DWARF GOLDEN HEART**—A well known variety which has long been popular both for market gardening and home uses. It is of medium height, stalks moderately large which when maturing turn a beautiful golden yellow color. More easily handled and brought to perfection than the Golden Self Blanching. Pkt., **5c**; oz., **20c**; ¼ lb., **60c**; lb., **$2.00.**

104 **PARIS GOLDEN**—A very superior and attractive variety with short thick ribs which when mature are a beautiful golden color with rosy pink on its outer ribs. It is one of the finest flavored celeries, very crisp and brittle; not so early as the White Plume or Golden Self Blanching but a thoroughly reliable sort for late crop. Pkt., **5c**; ½ oz., **15c**; oz., **25c**; ¼ lb., **75c**; lb., **$2.50.**

105 **BOSTON MARKET**—An old sort which has long been a favorite among eastern growers, and one of the most popular sorts for main crop. Plants are semi-dwarf, vigorous, capable of withstanding disease and thrifty. Pkt., **5c**; oz., **20c**; ¼ lb., **60c**; lb., **$2.00.**

106 **LARGE WHITE SOLID**—A large size, vigorous growing variety, well adapted for main crop or winter use. Stalks, when blanched are attractive, of light yellow color, nearly white. Matures somewhat later than Giant Pascal. Pkt., **5c**; oz., **20c**; ¼ lb., **60c**; lb., **$2.00.**

107 **CELERIAC OR TURNIP ROOTED CELERY**—Very popular with the French and Germans and is used for its roots only which have a fine, sweet, nutty celery taste. It is used either boiled or raw, has a delightful flavor and can be used in soups, salads or as a table vegetable. Culture about the same as for Celery. Pkt., **5c**; oz., **15c**; ¼ lb., **40c**; lb., **$1.50.**

CELERY SEED for flavoring. ¼ lb., **15c**; lb., **40c.**

CELERY PLANTS supplied in season. (June, July, August.) **Varieties,** White Plume, Golden Heart, and Golden Self Blanching, per 100, **50c**; per 1000, **$3.50.**

CORN—GARDEN SORTS.

PKTS. AND ½ PTS. POST-PAID. ON PINTS ADD 5c; ON QUARTS 10c, IF TO BE SENT BY MAIL.

ADAMS EXTRA EARLY CORN

One pint plants about 200 hills, six to eight quarts to an acre. For succession planting about every two weeks from April to end of July; ready for the table 60 to 90 days from planting.

CULTURE—Extra early dent corns can be planted at the end of March or early in April. Sugar corns are more tender and should not be planted until the weather is settled and ground becomes warm. Cultivate frequently and keep ground free of weeds.

EARLY DENT CORNS.

These are not sugar corns but valuable for their hardiness as they can be planted earlier and will mature quicker than sugar corns—hence, usually very profitable for market gardeners.

110 **EXTRA EARLY ADAMS**—The earliest variety and extensively used for first early table corn in the South. Stalks about 4 ft. high with few leaves and without suckers. Ears short, very full, 12 to 14 rows, kernels white and smooth; an extremely hardy sort; can be planted close together and usually popular. Pkt., **5c**; pt., **10c**; qt., **20c**; 4 qts., **50c**; bu., **$3.00.**

111 **EARLY ADAMS**—A little larger and later sort of about the same characteristics as Extra Early Adams. Stalks about 6 ft. high, ears 12 to 14 rows and a good variety for second early or very late planting. Pkt., **5c**; pt., **10c**; qt., **20c**; 4 qts., **50c**; bu., **$3.00.**

112 **EARLY NORTHERN FIELD**—Matures a little later than Early Adams but produces much larger ears, 14 to 16 straight rows. It is not as early as some of the early sugar corns but produces much larger ears which fill barrels quickly; hence, usually a profitable crop for market gardeners. Grains white and smooth; stalks 8 to 9 ft. high with a good many leaves. This is a valuable sort for very late crop, when too late to plant other varieties as it yields fairly well as a field crop. Pkt., **5c**; qt., **15c**; 4 qts., **40c**; bu., **$2.50.**

PERUVIAN GUANO—Will give excellent results on Corn producing very early Crops and largely increasing the yield. It can be applied either in drills or broadcast at from 100 to 300 lbs. per acre. Price per 100 lbs., **$3.25**; bag (200 lbs.), **$6.00**; Ton, **$55.00.**

CORN. SWEET OR SUGAR.

EARLY VARIETIES.

Sweet or Sugar Corns are so much superior for table use to the ordinary dent or field varieties, that they should be planted exclusively for this purpose except for very earliest crops. They are very prolific, producing in many cases 3 to 4 good ears to the stalk. As a market crop, corn is very profitable, as an acre produces from 800 to a 1000 dozen ears which sell readily at good prices

PKTS. AND ½ PTS., POST-PAID. ON PINTS ADD 5c; ON QUARTS 10c IF TO BE SENT BY MAIL

113 **GOLDEN BANTAM**—This is becoming one of the most popular of early sorts on account of its quick maturity and extra fine quality. Ears are eight rowed, 6 to 7 inches long, of medium size with golden yellow grains which are very tender and have a peculiar, delicious flavor. Height 4 to 5 ft., very much desired for family gardens. Pkt., **5c;** ½ pt., **15c;** qt., **25c;** 4 qts., **75c;** bu., **$4.50.**

114 **PREMO**—Premo can be planted fully as early as the Adams, for the young plants withstand slight frosts, while the other varieties are tender and the seeds will rot if planted before the soil becomes warm. The stalks grow about five feet high, and are very vigorous, generally bearing two well-developed ears to the stalk. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **25c;** 4 qts., **75c;** bu., **$4.50.**

115 **"PEEP O'DAY"**—Probably the earliest Sugar Corn; tender, sweet. The cob is white, kernels pearly white, ears delicate and dainty, exceptionally good for early market or home consumers. It will prove a money-maker in any garden. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **25c;** 4 qts., **75c;** bu., **$4.50.**

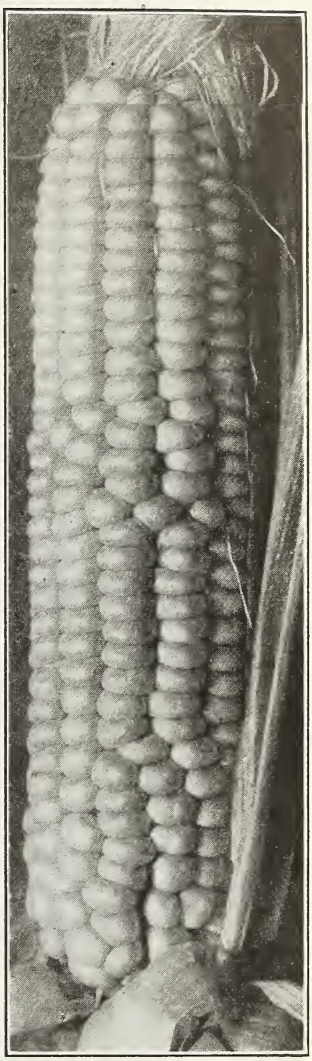
116 **EARLY SHEFFIELD**—A cross between Adams Extra Early and Early White Cory, which combines the robust growth and extreme hardiness of the Adams with fine sugary quality of the Cory. Ears average about six inches long, grains of medium size, arranged in ten to twelve regular rows. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **25c;** 4 qts., **70c;** bu., **$4.00.**

117 **MAMMOTH WHITE CORY**—One of the best, extra early corns producing very large ears for so early a variety. Stalks about 4 ft. high, generally bearing 2 large finely shaped ears which become fit for use very early. Grains large, broad, very white, of fine quality and usually 12 to the cob. A splendid sort for private gardens and probably the most profitable for early market gardens. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **25c;** 4 qts., **70c;** bu., **$4.00.**

118 **BLACK MEXICAN**—Wherever known one of the most popular of early garden sorts on account of its extreme sweetness and fine tender quality. When ripe the grain is bluish black but when ready for the table is white. Ears about 8 inches long, 8 rowed. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **25c;** 4 qts., **70c;** bu., **$4.00.**

119 **HOWLING MOB**—A variety a little later than Mammoth White Cory. Ears measure seven to nine inches in length, twelve to fourteen rows; white grains. Stalks strong, of vigorous growth, four and a half to five feet in height, have abundant foliage and usually produce two good ears to the stalk. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **25c;** 4 qts., **70c;** bu., **$4.00.**

120 **EARLY MINNESOTA**—Not quite so early as Mammoth White Cory but one of the best second early sorts for market and home gardens. Stalks about 6 ft. high, bearing 2 ears about 8 inches long, 8 rowed, broad kernels which do not shrink much in drying. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **25c;** 4 qts., **70c;** bu., **$4.00.**



GOLDEN BANTAM

121 **KENDEL'S EARLY GIANT**—A remarkably large eared second early sort which is very popular in some sections. Ears are 8 to 9 inches long, 12 row; grains broad, rather shallow but the quality is good. Pkt., **5c;** pt., **10c;** qt., **20c;** 4 qts., **60c;** bu., **$3.50.**

122 **CROSBY'S EARLY**—A second early sort, having twelve rows; grains pure white, deep, very sweet and tender. More largely used for canning than any other early sort. Pkt., **5c;** pt., **10c;** qt., **20c;** 4 qts., **60c;** bu., **$3.50.**

123 **PERRY'S HYBRID**—A popular sort in Eastern sections for second early crop. Stalks about 6 ft. high, producing 2 ears of 8 inches long, 12 to 14 rowed. Grains deep and tender. Pkt., **5c;** pt., **10c;** qt., **20c;** 4 qt., **60c;** bu., **$3.50.**

SWEET FODDER CORN—For sowing in drills for forage purposes, as is it the best of all corns both as green corn for ensilage or to be cut and used dry. Both the stalks and fodder contains large amount of saccharine matter which is both fattening and relished by stock. It is sown in drills 2½ to 3 feet apart and requires 1 to 1½ bus per acre. Peck, **60c;** bus., **$2.00.**

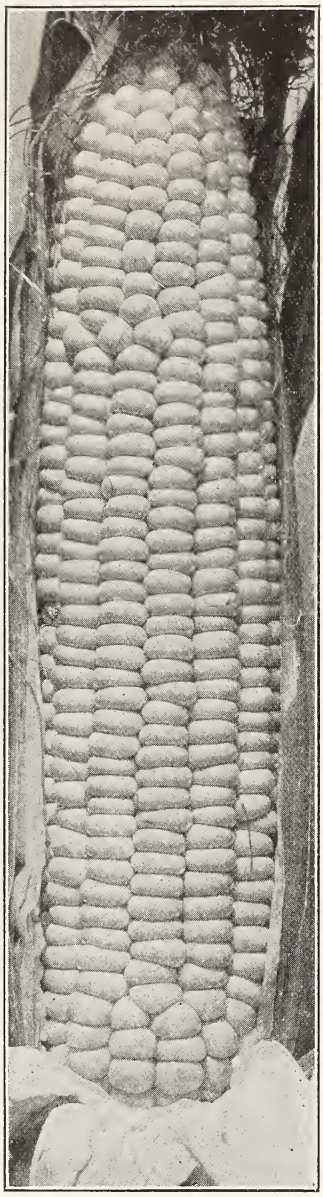
PARCEL POST RATES—In estimating on Zone Rates, Corn may be taken on the following basis:

Early Varieties and Field Corn, say about 14 ounces per pint. 1¾ lbs. per quart.

Sweet Corn about 12 ounces per pint. 1½ lbs. per quart.

CORN—SWEET OR SUGAR—Cont'd.

124 **COUNTRY GENTLEMAN**—Probably the most popular of all sorts for home gardens on account of its sweetness, tenderness and delicious flavor. Ears 7 to 8 inches long, round, medium size. Grains zigzag or staggered, small in size but set close on the cob and very deep. Pkt., **5c**; ½ pt., **10c**; pt., **15c**; qt., **25c**; 4 qts., **75c**; bu., **$4.00.**



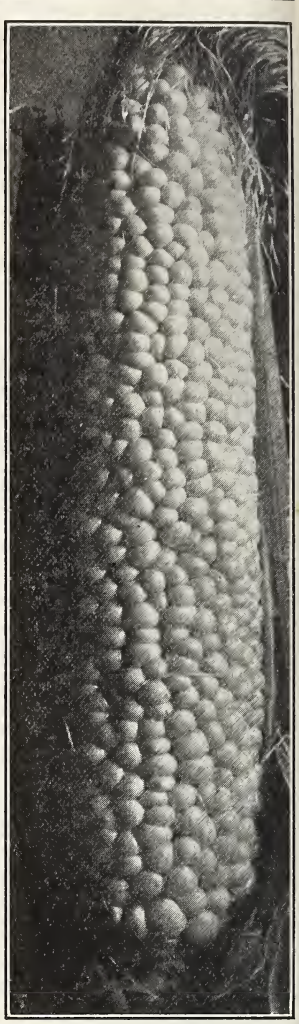
STOWELL'S EVERGREEN CORN

125 **STOWELL'S EVERGREEN**—One of the standard main crop sorts which has long been popular with commercial growers, canners and one of the best for home gardens. It is hardy, thrifty, productive, very tender and sugary and remains in edible state longer than most other sorts. Ears 7 to 8 inches long, having 14 to 20 rows; of very deep grain. Stalks 8 to 9 ft. high, bearing 2 or 3 large ears. Pkt., **5c**; pt., **10c**; qt., **20c**; 4 qts., **50c**; bu., **$3.50.**

126 **ZIG-ZAG EVERGREEN**—A development of the Stowell's Evergreen which has become very popular. The rows instead of being straight are irregular; the grains set very close on the cob. Ears are 8 inches long large grains, very deep, sugary, tender and of fine flavor. This is becoming a very popular sort and in many sections is superseding the well known Stowell's Evergreen. Pkt., **5c**; pt., **10c**; qt., **20c**; 4 qts., **50c**; bu., **$3.50.**

127 **LATE MAMMOTH**—The largest and latest of all Sugar Corns, producing ears which are about 11 inches long, 16 to 18 rowed. Grains are broad, somewhat short, but of good flavor, sweet, tender and delicious. One of the best sorts for late crop especially for market. Pkt., **5c**; pt., **10c**; qt., **20c**; 4 qts., **50c**; bu., **$3.50.**

128 **EARLY MAMMOTH**—Resembling the well known Late Mammoth in general characteristics but 10 days to two weeks earlier and slightly smaller in size. Pkt., **5c**; pt., **10c**; qt., **20c**; 4 qts., **50c**; bu., **$3.50.**



COUNTRY GENTLEMAN CORN

POP CORN.

A very profitable crop in many sections and grown in enormous quantities. It is popularly "the boys' crop" and all gardens should have a small quantity.

129 **RICE**—A well known white sort with pointed grains; very highly prized for popping and most satisfactory. Pkt., **5c**; ½ pt., **10c**; pt., **15c**; qt., **25c.**

130 **WHITE PEARL**—A smooth grained sort making fair sized ears; grains pearly white reliable for popping. Pkt., **5c**; ½ pt., **10c**; pt., **15c**; qt., **25c.**

131 **QUEEN'S GOLDEN**—A large eared yellow sort having grains about twice as large as the white sorts. It pops perfectly white and is tender. Pkt., **5c**; ½ pt., **10c**; pt., **15c**; qt., **25c.**

CORN SALAD.

A popular crop with Europeans and an excellent salad for winter and spring. The seed is sown in August or September, in drills one foot apart. Press on the soil to make it firm and it will germinate better. As freezing weather approaches cover with straw or coarse leather. Seed can also be sown very early in the spring if on rich soil.

132 **LARGE SEEDED**—Round leaved, the best variety. Pkt., **5c**; oz., **10c**; ¼ lb., **20c**; lb., **60c.**

CRESS.

133 **CURLED CRESS**—Leaves of this are much frilled and curled. Used for garnishing and with lettuce as it gives a pungent taste which makes an agreeable addition. Plants are of rapid growth and attain a height of about one foot. Pkt., **5c**; oz., **10c**; ¼ lb., **15c**; lb., **40c.**

134 **WATER CRESS**—This is a well known cress, used so extensively for garnishing and as a salad. It will succeed any where that the ground is moist; is especially valuable around springs and along small streams. After once established it will need no further attention. When gathered it should be cut—not broken off. In summer it is best to cut closely, the oftener the better. Pkt., **5c**; oz., **30c**; ¼ lb., **$1.00.**

CORN SALAD

CUCUMBER.

Usually a profitable crop for market, as if not salable for table uses, finds a fair market with pickle factories. All home gardens should grow Cucumbers, as they are useful as a salad or for pickling. Cucumbers fresh from the garden are much superior to those purchased, which are often wilted.

One ounce plants 50 hills; two pounds to one acre. Plant in April or May for early crop; ready for the table 50 to 75 days from planting.

CULTURE—Rich soil or one containing plenty of well rotted manure is best, hence, hills are usually made about 4 feet apart using manure or Peruvian Guano well mixed with the soil. For very earliest crop the seed may be started in hot beds, in pots, small paper boxes, or pieces of sod, grass side down, so that they can be readily transplanted to open ground without disturbing the roots. For earliest crop outdoors plant 8 to 10 seeds in hills or drills 4 feet apart. On cold nights or threatened frost they can be protected by pieces of paper weighted with earth; after danger of frost and destruction by insects, thin the plants to about 4 to the hill. For late crop plant from the end of May until July. Cultivate occasionally keeping the grass and weeds out, and when the fruit is ready for use, pick whether wanted or not, as it will extend the life and productiveness of the vines.

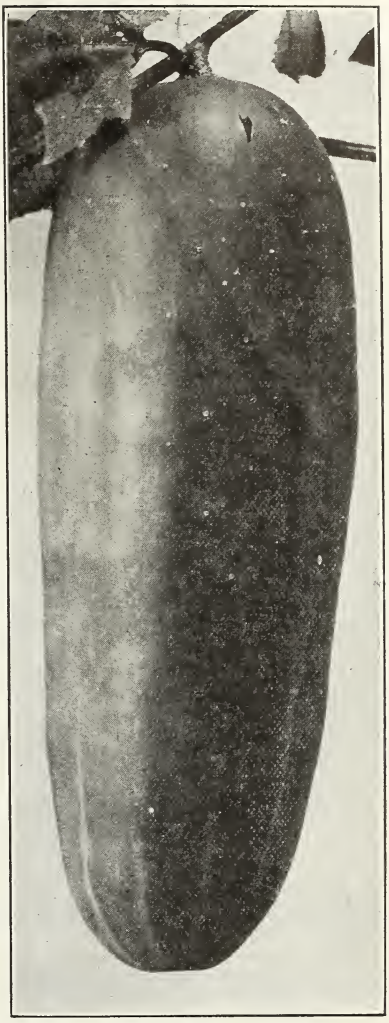
INSECT REMEDIES—For the Yellow Striped Beetle, dust with Tobacco Dust or Slug Shot. Sometimes covering with dry earth will be beneficial. For the Cucumber Borer which bores into the cucumber, hand-picking and destroying the infested cucumbers is the only remedy.

135 **IMPROVED EARLY WHITE SPINE**—One of the best sorts for table use and probably the most popular sort grown by market gardeners and truckers. The vines are vigorous, producing fruit early and abundantly. Fruits are uniformly straight, about 8 inches long, vivid green color changing to and streaked a whitish green at the tip. Pkt., **5z**; oz., **10c**; ¼ lb., **30c**; lb., **90c.**

136 **IMPROVED LONG GREEN**—One of the most popular sorts for home gardens and in country districts for home markets. Fruits are very long, often 12 inches, slender and uniformly dark green color. It is rather late maturing. The vines are very vigorous and fairly productive. The matured fruits are excellent and tender for table use and both large and small can be used for pickling. Pkt., **5c**; oz., **10c**; ¼ lb., **30c**; lb., **90c.**

137 **DAVIS PERFECT**—A development by crossing the Improved Long Green with an English Frame Variety. It is dark, rich green color, slightly tipped with white at the end; has very few seeds and excellent for slicing. Fruits are often 12 inches long, very slim and showy. Particularly fine for home gardens. Pkt., **5c**; oz., **10c**; ¼ lb., **30c**; lb., **$1.00.**

138 **EARLY FRAME**—A well known short, green variety, producing quite abundantly, uniformly straight, moderate sized fruit. Valuable for very early planting or for late use for pickling as it is more prolific than the large fruited sorts. Pkt., **5c**; oz., **10c**; ¼ lb., **25c**; lb., **75c.**



IMPROVED WHITE SPINE CUCUMBER

139 **KLONDYKE**—A variety of the White Spine type which is somewhat darker green and a little more pointed at the ends. It is very popular in some sections; produces abundantly and has a fine, tender flavor. Pkt., **5c**; oz., **10c**; ¼ lb., **30c**; lb., **90c.**

140 **JERSEY PICKLING**—A variety shorter than Long Green, slender and produces very abundantly. Vines are vigorous and productive. A very popular main crop sort for market amd commercial uses. Pkt., **5c**; oz., **10c**; ¼ lb., **25c**; lb., **75c.**

141 **GREEN PROLIFIC**—This variety has long been popular with commercial growers for pickling. The vines are healthy, vigorous and very productive. Fruits medium length, straight, smooth and vivid green and uniform. Pkt., **5c**; oz., **10c**; ¼ lb., **25c**; lb., **75c.**

142 **NICHOL'S MEDIUM GREEN**—A variety intermediate in length between the White Spine and Long Green, producing straight, medium sized cylindrical fruit of dark green color, which are most excellent for slicing and extremely popular for pickling. Vines vigorous, productive. A very profitable variety for canners and commercial growers for late crop. Pkt., **5c**; oz., **10c**; ¼ lb., **25c**; lb., **75c.**

143 **JAPANESE CLIMBING**—A variety having very storng vines which throw out numerous tendrils and can be trained upon trellices or poles. The skin is sooth, dakr green, turning to brown and netted when ripe. The flesh is pure white, crisp, and of mild flavor. Fruits 12 to 16 inches long. It is an abundant producer of long, straight handsmoe large fruits. Pkt., **5c**; oz., **10c**; ¼ lb., **35c**; lb., **$1.00.**

144 **GHERKIN OR BURR CUCUMBER**—Grown exclusively for pickles and especially for mangoes and sweet pickles. The fruits are small, oval, prickly and produced abundantly. Vines are longer and more vigorous than cucumber vines—hence, require a little more space. The seed is distinctly smaller than other Cucumbers. Pkt., **5c**; oz., **10c**; ¼ lb., **50c**; lb., **$1.50.**

PKTS., OZ. AND ¼ LBS. MAILED FREE. TO LB. PRICES ADD 5c IF BY MAIL.

EGG PLANT.

A well known popular vegetable which produces large purple fruits. It is served mostly fried. Seed germinates slowly and should be started in hot bed.

One ounce produces 1500 plants. Four ounces will produce enough to set one acre. Ready for table in 120 days from sowing.

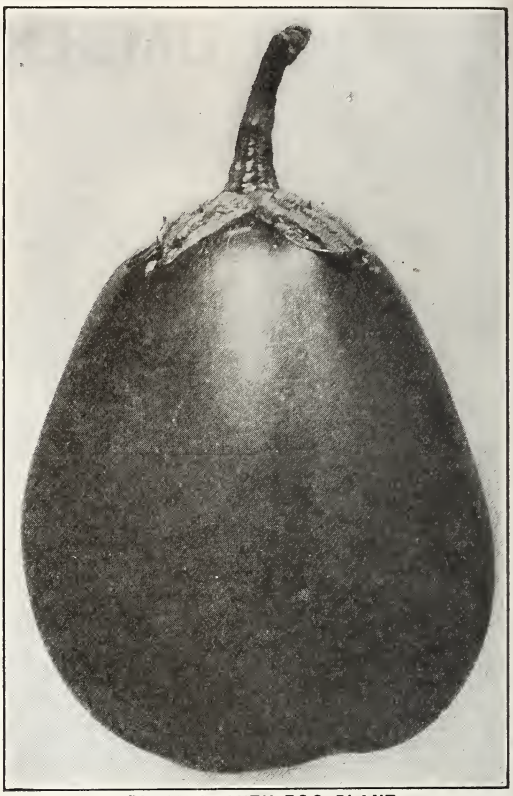
CULTURE—Sow in February or March in warm hot beds. When the plants have two rough leaves, transplant to 3 or 4 inches apart or into small pots; after all danger of frost is past, say about the middle or end of May, transplant to the garden, setting plants about three feet apart each way. It is desirable to protect the young plants from very hot sun at first.

INSECT REMEDIES—For the potato bug or squash bug use Slug Shot or Paris Green mixed with flour or Land Plaster. (See under heading of Cabbage.)

145 **BLACK BEAUTY**—Ten days to two weeks earlier than New York Improved Purple. Fruits slightly longer and darker than this variety, being rich dark purple, large and symmetrical. It is very desirable for market as it holds its color a long time. It is entirely free from spines; splendid for early crop or very late planting. Pkt., **5c;** oz., **30c;** ¼ lb., **$1.00;** lb., **$3.50.**

146 **NEW YORK IMPROVED PURPLE (Spineless)**—This has long been a general favorite both for market gardeners and home use. It is the largest variety in cultivation and one of the best. The plant is robust, usually producing 4 to 6 large, oval fruits of splendid, dark purple color. Pkt., **5c;** oz., **30c;** ¼ lb., **$1.00.** lb., **$3.00.**

147 **EARLY LONG PURPLE**—A very early maturing and most productive variety. Fruit long, dark, rich purple, of fair size and fine quality. Pkt., **5c;** oz., **25c;** ¼ lb., **75c;** lb., **$2.50.**



BLACK BEAUTY EGG PLANT

PLANTS, N. Y. Improved per doz. **40c;** per 100 **$2.50** Ready in May.

ENDIVE.

One of the best salads for fall and winter use and sometimes used for greens, flavoring soups and stews. It may be grown at any season but is more generally planted for fall.

CULTURE—For early use, sow about April 15th; for late use, sow in August, in drills 18 inches apart and when large enough thin out to about one foot apart. When nearly grown tie the outer leaves together over the center in order to blanch up the heart. By covering fresh plants every few days a succession may be kept up.

148 **GREEN CURLED**—One of the hardiest and best varieties for general use. It has deep green leaves, beautifully cut and curled and is early blanched; is very crisp, tender and of fine flavor. Pkt., **5c;** oz., **15c;** ¼ lb., **35c;** lb., **$1.00.**

GREEN CURLED ENDIVE.

149 **BROAD LEAF BATAVIAN (Escarolle).**—A variety having broad, more or less twisted, waved, bright green leaves with thick white mid-ribs. It is much larger in growth than other sorts and has a flavor all its own. The inner leaves form a very solid, clustering head; are blanched a beautiful deep, creamy white; crisp, tender and of fine flavor. Very highly esteemed by the French and popular wherever known. Pkt., **5c;** oz., **15c;** ¼ lb., **40c;** lb., **$1.25.**

150 **MOSS CURLED**—A compact growing variety forming large dense clusters, finely divided, medium green leaves. When properly blanched, is rich creamy white and tender. An ornamental variety for salads. Pkt., **5c;** oz., **15c;** ¼ lb., **35c;** lb., **$1.00.**

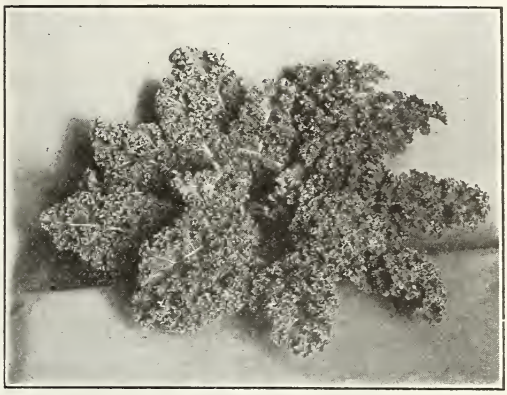
GARLIC.

A bulbous rooted plant of the Onion family, with a strong penetrating odor; very desriable for flavoring both cooked vegetables, soups, etc., as well as salads. Garlic does not have seed and is planted from small bulbs only. Plant same as Onions in rows 8 to 12 inches apart; set bulbs 4 inches apart in the row, covering 2 inches deep. When the leaves turn yellow, take up the bulbs, dry in the shade and store in a dry loft as you would onions. **Bulbs, ¼ lb., 15c; lb., 40c.**

KALE.

A popular crop for fall, winter and spring use as greens. In the South it is boiled with bacon. Excellent for garnishing. In addition to its table uses it is a splendid soil improver and very nutritious as a grazing crop for cattle, hogs or sheep.

CULTURE—In this section it is usually sown broadcast from the middle of August to the middle of October at the rate of 3 to 4 pounds to the acre. Scotch kale is sown earlier and when very early is usually sown in drills. In the spring seed can be sown in February March and April. Spring sown Kale requires 5 to 6 pounds to the acre and Smooth Kale should have 6 to 8 pounds to the acre. The ground should be prepared cleanly and harrowed as finely as possible. Seed can be covered with a smoothing harrow or roller but not covered too deep.

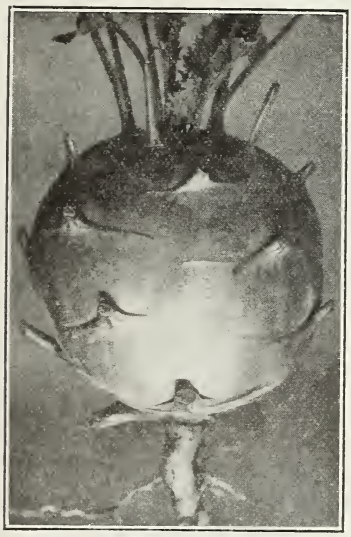


DWARF GERMAN CURLED KALE

153 **DWARF GERMAN CURLED**—An old standard winter variety in this section. Leaves are light green in color, tinged with purple, beautifully curled, and when properly cooked make a very palatable dish of greens. In this locality, will stand the winter. Oz., **5c**; ¼ lb., **15c**; lb., **40c**; 5 lbs. and over, **35c** per lb.

154 **DWARF CURLED SIBERIAN**—A vigorous growing sort of spreading habit, its green foliage having a distinctive bluish tinge or bloom. Very hardy and a favorite in many sections both for greens and extensively grown for forage. Oz., **5c**; ¼ lb., **15c**; lb., **40c**; 5 lbs. and over, **35c** per lb.

155 **DWARF GREEN CURLED SCOTCH (OR NORFOLK)**—A finely curled, spreading, low growing variety, which is very popular around many trucking centers, especially in the East. The leaves are attractive, bright green color and beautifully curled which make it excellent for garnishing. It must be sown earlier than other sorts; usually from July until end of August or can be sown in March. Can be sown either in drills or broadcast. Pkt., **5c**; oz., **10c**; ¼ lb., **20c**; lb., **60c**.



WHITE VIENNA KOHL RABI

156 **SPRING OR SMOOTH KALE**—A hardy, quick growing, smooth leaf variety. It can be sown in the fall in September and will generally stand the winter but is more largely used for sowing in the spring on account of its quick growth. It can be cut in five to six weeks from sowing. 2 oz., **5c**; ¼ lb., **10c**; lb., **20c**; 10 lbs. and over, **15c** per lb.

KOHL RABI.

A vegetable intermediate between a Cabbage and a Turnip which combines the flavor of both. It forms a turnip-shaped bulb above ground which is boiled and served like Turnips. If used when young is tender and a very desirable vegetable.

CULTURE—For early use sow in hot beds and transplant. Out of doors sow in open ground the first part of April in rows 18 inches apart; thin out or transplant to 6 inches apart in the row. Cultivate same as Cabbage. It can also be sown the latter part of June or in July for fall use. One ounce will sow 200 feet of drill.

157 **EARLY WHITE VIENNA**—Very early with small tops, bulbs good size, light green or whitish. It is the best sort for general use, has white tender flesh of excellent quality. Pkt., **5c**; oz., **20c**; ¼ lb., **50c**; lb., **$1.50**.

LARGE FLAG LEEK

LEEK.

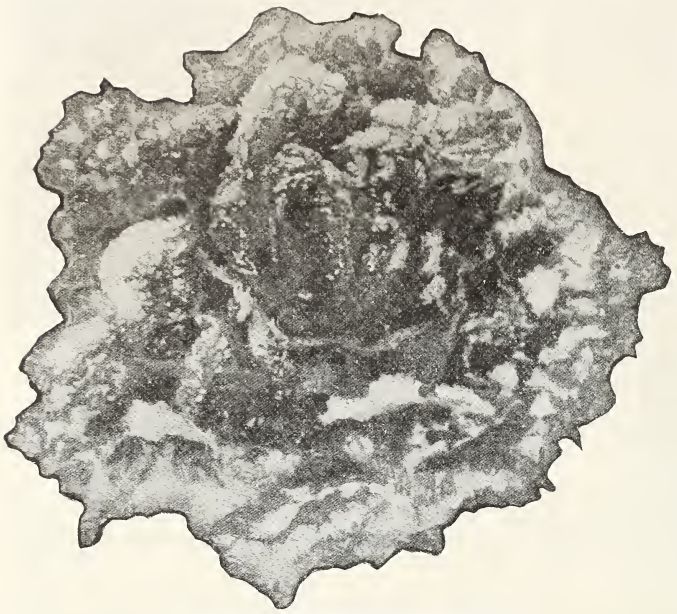
Generally considered superior to onions for flavoring. Leaves flat, stems very large, cylindrical and bulbous.

CULTURE—Sow as early in the spring as the ground will permit, in rows 12 to 15 inches apart, covering about ½ inch deep. Thin out to 6 inches apart and draw earth to them in cultivating. Leek can be transplanted like onions if desired. For very white and tender Leek transplant when six inches high, setting 4 inches apart in trenches about 2 feet apart and earth like celery. One ounce will sow about 100 feet of drill.

158 **LARGE FLAG**—A hardy variety of good quality which is popular in all sections. Pkt., **5c**; oz., **15c**; ¼ lb., **50c**; lb., **$1.50**.

159 **LARGE ROUEN**—Stems large but comparatively short. Leaves very broad covered with a whitish bloom. This variety remains in condition for use a long time. Pkt., **5c**; oz., **15c**; ¼ lb., **50c**; lb., **$1.75**.

LETTUCE.



BLACK SEEDED SIMPSON LETTUCE

A popular crop in all small gardens and one of the most profitable for market gardeners both for winter forcing and for summer growing providing the weather is seasonable or irrigation can be done.

CULTURE——For Winter Forcing.—Sow from September to February; the curled varieties about every four weeks apart or the heading sorts about six weeks apart. As one crop is cut, another should be ready for planting.

Out of doors—For early spring crop plants can be started in hot beds and transplanted to rows one foot apart, setting the plants 6 to 8 inches apart in the row. Later sow seed in rows 12 to 15 inches apart and thin out or transplant if desired leaving the heads to stand 6 to 8 inches apart in the row. A succession of varieties should be kept up from early summer until late fall.

One ounce sows 300 feet of drill. Three pounds one acre. One ounce produces about 2500 plants; an acre requires about 50,000 plants set 8 x 15 inches.

INSECT REMEDIES—For the green lettuce worm and green measuring worm, which eat the leaves, spray with a solution of Hellebore in water, at the rate of 1 lb. of Hellebore to 15 or 20 gallons of water. For green lice, spray with a solution of Tobacco Extract. In green houses fumigation with Nico-Fume Liquid or Tobacco stems, will be effective. In frames, fumigation with Nico-Fume Paper is best. Tobacco stems or Tobacco dust applied on the soil or around the beds, is an effectual preventative of green lice.

CURLED OR LOOSE-HEAD VARIETIES.

161 **GRAND RAPIDS**—The most popular variety for green house forcing, especially for shipping. It is of quick growth, hardy and not liable to rot; remains in good condition several days after being fit to cut. Plants are upright and uniform; leaves finely crimpled at the edges. It is the heaviest loose-headed sort, will stand shipping better and is a very attractive variety. Pkt., **5c;** oz., **15c;** ¼ lb., **35c;** lb., **$1.00.**

162 **BLACK SEEDED SIMPSON**—The best sort for nearby markets and for home gardens on account of its superior quality. It forms a large, loose head, very bright green, nearly white, and is exceedingly tender. Is largely used for forcing under glass and a superior sort for earliest crop. Pkt., **5c;** oz., **15c;** ¼ lb., **35c;** lb., **$1.00.**

163 **EARLY CURLED SIMPSON (White Seeded)**—Makes a large, loose curled head similar to Black Seeded Simpson. Particularly adapted for sowing thickly and cutting when the plants are young. Leaves light green, slightly frilled, much blistered, crisp, sweet and tender. Pkt., **5c;** oz., **15c;** ¼ lb., **35c;** lb., **$1.00.**

164 **EARLY CURLED SILESIAN**—An old and very popular variety which is probably the earliest and quickest sort grown. Plants loose, not quite so large as Black Seeded Simpson. Popular for outside. Pkt., **5c;** oz., **15c;** ¼ lb., **35c;** lb., **$1.00.**

165 **EARLY PRIZE HEAD**—A large clustering, non-heading sort, most excellent for home gardens as it is very early. It is too tender for shipping. Leaves are finely curled and crumpled, bright green tinged with brownish red; very crisp and tender. Pkt., **5c;** oz., **15c;** ¼ lb., **35c;** lb., **$1.00.**

166 **DENVER MARKET**—A bright green clustering Lettuce, forming loose, medium size heads. The inner leaves are well blanched; the outer are frilled. A good sort for out of door use and sometimes used for forcing. Pkt., **5c;** oz., **14c;** ¼ lb., **35c;** lb., **$1.25.**

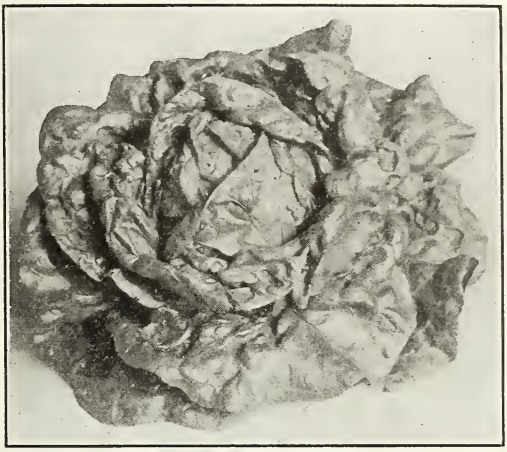
Cabbage or Heading Varieties.

167 **TOP NOTCH**—A distinctly improved variety of Big Boston and one of the very best for forcing or out of door culture. Under favorable conditions the heads will measure 10 to 12 inches across; are bright, lively green color without the brownish marking of Big Boston. The heart and inner leaves are pure white. It is deliciously flavored, very tender, of splendid quality and highly recommended for extensive market growing or home use as it will be found thoroughly reliable in heading and the most profitable of this type. Pkt., **5c;** oz., **20c;** ¼ lb., **60c;** lb., **$2.00.**

TOP NOTCH LETTUCE

LETTUCE.

CABBAGE OR HEADING SORTS—CONT'D.



CALIFORNIA CREAM BUTTER

168 **BIG BOSTON**—This has long been a favorite sort with market gardeners and truck growers and in some sections is planted almost exclusively. It forms a large compact head, forces well in frames and thoroughly satisfactory for outdoor crops in the spring or very late head crop in the fall. Leaves are broad, comparatively smooth, color bright light green. The heads slightly tinged with reddish brown. Pkt., **5c**; oz., **15c**; ¼ lb., **40c**; lb., **$1.25.**

169 **CALIFORNIA CREAM BUTTER**—A splendid sort for second early crop which has glossy, deep green leaves, the outer ones slightly splashed with brown. It forms a large, very solid head, rich light yellow in color, very tender and buttery. A reliable sort for market or home gardens. Pkt., **5c**; oz., **15c**; ¼ lb., **35c**; lb., **$1.00.**

170 **PHILADELPHIA BUTTER**—Similar in characteristics and growth to California Cream Butter. Leaves, however, are somewhat more spotted with yellowish brown blotches. A very tender, crisp and satisfactory sort for early planting. Pkt., **5c**; oz., **15c**; ¼ lb., **35c**; lb., **$1.00.**

IMPROVED HANSON

171 **IMPROVED HANSON**—A splendid summer heading sort and probably the most popular of its class in this section. The plant is compact, forming a large cabbage like head which remains in good condition a long time. The outer leaves are yellowish-green, somewhat crumpled with a large distinctive mid-rib. The inner leaves white, sweet and tender. This variety is a little coarse in quality but on account of its large size and general reliable summer heading qualities, is profitable and desirable for summer use. Pkt., **5c**; oz., **15c**; ¼ lb., **35c**; lb., **$1.00.**

172 **SALAMANDER**—A splendid summer sort producing large, compact, light green heads of excellent quality. The leaves are broad, thick, somewhat crumpled, closely overlapped so that the inner ones are finely bleached. Withstands hot weather remarkably well. Is of fine quality and one of the best summer sorts for home use. Pkt., **5c**; oz., **15c**; ¼ lb., **35c**; lb., **$1.00.**

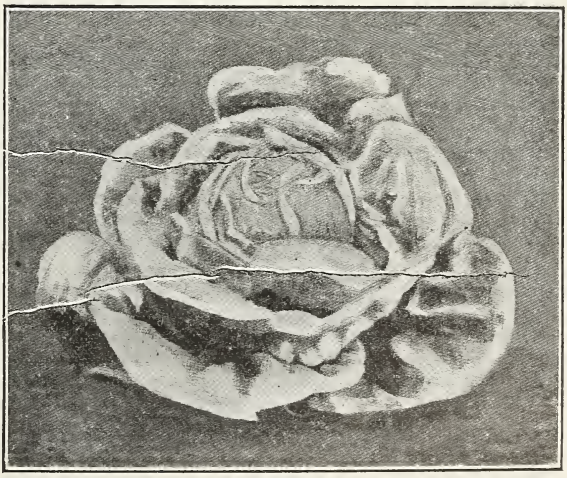
173 **DEACON**—An excellent summer sort, producing heads of large size which are very firm and remain in condition for use a long time. Plants are compact with few outer leaves. Inner leaves bright, rich yellow; fair quality. Pkt., **5c**; oz., **15c**; ¼ lb., **35c**; lb., **$1.00.**

174 **OAK LEAVED**—A variety having peculiarly angular leaves, which is ornamental and distinct. Produces hard, solid heads and is a good Summer sort. Interior creamy white, crisp, tender and excellent quality. Pkt., **5c**; oz., **15c**; ¼ lb., **35c**; lb., **$1.00.**

COS LETTUCE (**ROMAINE**)—A distinct variety, having long spoon-like leaves, which are folded into a conical or sugarloaf head. Very much esteemed for salads, especially in Europe. Seed should be sown out doors very early, thining out to three or four inches apart. When near maturity tie the leaves over the head for blanching.

White Paris—Pkt., **5c**; oz., **15c**; ¼ lb., **40c**; lb., **$1.25.**

LETTUCE PLANTS—Supplied in season to nearby customers. Varieties: Big Boston and other good heading sorts. Per 100, **25c**; per 1000, **$2.00.**



DEACON

Don't Forget When Sending Your Order

To include the names of a few of your friends and neighbors who would like this catalogue.

MAILED FREE.

HENDERSON'S BUSH MUSK MELON

MUSK MELON OR CANTALOUPE.

These can be successfully grown in nearly all gardens. If the soil is very rich and heavy, Salmon-Fleshed sorts will produce the best. If light or loamy, Green-fleshed sorts will succeed admirably. Among green-fleshed sorts the "Queen of Gems" is one of the earliest and best. In salmon flesh sorts, "Burrell's Gem," "Paul Rose" are among the best.

One ounce plants 50 hills; two pounds to one acre. Plant in May for early crop; in June for late crop.

CULTURE—Seed is planted in hills 6 ft. apart, putting 10 to 12 seeds to the hill and covering one inch deep. If land is not rich, use well rotted manure or a little Peruvian guano mixed with the soil. When danger of insects is over, thin out to 4 plants to the hill.

INSECT REMEDIES—For the striped beetle which is troublesome, dust plants lightly with Slug Shot, air-slacked lime, tobacco dust or even dry road dust. If the plants get too rank, pinch off the end of the vines after they have set fruits. Cultivate shallow and often. Green flesh melons will become more netted if about 200 lbs. of salt are broadcasted to the acre.

Packets, ounces and ¼ lb., mailed free; for ½ lb., remit 3c, for pound 5c extra if to be sent by mail.

GREEN FLESHED VARIETIES.

178 **HENDERSON'S BUSH**—A new sort which grows in bush form, and is radically different from other sorts. There is a distinct shortening of the stem between joints and while the plant has just as many leaves as the older sorts the vines do not run; hence, it can be grown in hills 3 ft. apart. The fruit is small, resembling Jenny Lind and is excellent in quality and splendid flavor. It is very prolific and especially desirable on rich, light, well manured soil— hence, valuable for market gardeners having very expensive land and all small home gardens. Pkt., **10c;** oz., **30c;** ¼ lb., **1.00;** lb., **$3.50.**

179 **QUEEN OF GEMS**—This is undoubtedly one of the best of the green fleshed types on account of its extreme earliness, large size, extra fine quality and large yields. It is two weeks earlier than the Rocky Ford and more productive, a little more netted and somewhat larger. It is almost entirely rust and blight proof, very productive and the fruits are sweet and luscious. Fruits are oval, ribbed, thick green flesh tinged with yellow. We cannot recommend this too highly for market or family use. Pkt., **5c;** oz., **15c;** ¼ lb., **50c;** lb., **$1.50.**

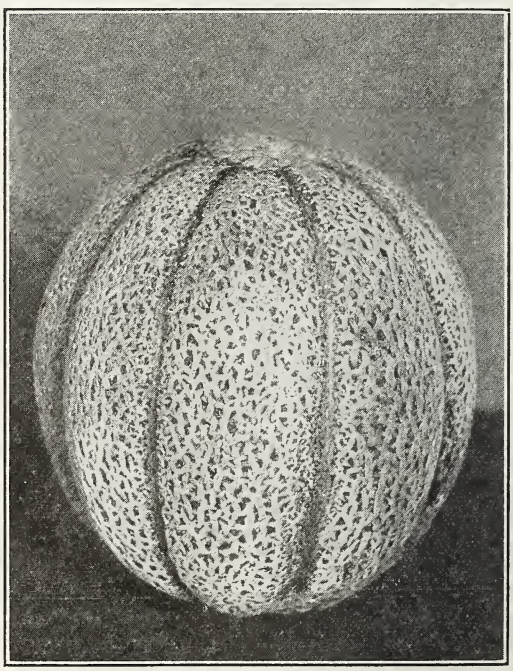
180 **ROCKY FORD**—A well known small variety which has become famous. It is oval, with green flesh, very sweet and highly flavored. Vines vigorous and productive. Pkt., **5c;** oz., **10c;** ¼ lb., **20c;** lb., **60c;** 5 lbs. and over, **50c** per lb.

181 **NETTED GEM**—A variety which has been introduced nearly 30 years and still retains its great popularity. The fruits are medium size, oblong, ribbed, netted, very firm, solid, and stand shipping remarkably well. Vines vigorous and productive. Pkt., **5c;** oz., **10c;** ¼ lb., **20c;** lb., **60c;** 5 lbs. and over, **50c** per lb.

182 **GREEN NUTMEG (or Jenny Lind)**—Fruits small somewhat flattened, deeply ribbed and netted. Flesh green, exceedingly sweet. An extra early variety and on account of its size, a desirable table melon. Vines are small but vigorous and productive. Pkt., **5c;** oz., **10c;** ¼ lb., **20c;** lb., **60c.**

183 **ACME OR BALTIMORE MARKET**—Similar in shape to Rocky Ford but larger. Flesh is thick, green, well flavored and sweet. Very productive and a sure cropper. One of the most desirable of the large or medium size melons. Pkt., **5c;** oz., **10c;** ¼ lb., **20c;** lb., **60c;** 5 lbs. and over, 50c per lb.

184 **EXTRA EARLY HACKENSACK**—Two weeks earlier than the Large Hackensack and produces medium sized fruit, somewhat flattened, evenly deep ribs with coarse netting. The flesh is green, slightly tinged with yellow, juicy and sweet. Pkt., **5c;** oz., **10c;** ¼ lb., **25c;** lb., **75c;** 5 lbs., **65c** per lb.



QUEEN OF GEMS

185 **LARGE HACKENSACK (or Turk's Cap)**—An old and well known sort which produces very large green-fleshed fruits which are nearly round and flattened. Flesh, green, thick, juicy and sweet. Pkt., **5c;** oz., **10c;** ¼ lb., **20c;** lb., **60c;** 5 lbs. and over, **50c** per lb.

186 **CASABA OR PERSIAN**—An old variety whichstill retains its popularity. Produces very large oblong melons, heavily ribbed. Flesh green, slightly tinged with yellow, thick, rather coarse, but juicy. Pkt., **5c;** oz., **10c;** ¼ lb., **20c;** lb., **60c.**

MUSK MELON or CANTALOUPE—Cont'd.

SALMON FLESHED VARIETIES.

187 **BURRELL'S GEM**—Similar in size and shape to the well known Rocky Ford. Has thick, deep salmon flesh, tender, juicy and sweet. One of the most popular sorts for shipping and a favorite with large growers as it produces well, being exceedingly vigorous and productive. Pkt., **5c;** oz., **10c;** ¼ lb., **25c;** lb., **75c.**

188 **EMERALD GEM**—An early yellow fleshed melon of small to medium size which is one of the very best for home gardens. Vines vigorous and productive. Fruits globe shaped, flattened, somewhat irregularly ribbed and very slightly netted. Outer skin dark green when young, becoming slightly tinged with yellow. Flesh, deep salmon yellow, thick, melting and very highly flavored. Pkt., **5c;** oz., **10c;** ¼ lb., **30c;** lb., **$1.00.**

189 **TIP TOP**—A popular sort with market gardeners, producing very large sized melons, ribbed but almost smooth skin. Flesh salmon, very deep, a little coarse but exceedingly sweet and luscious. Especially desirable for very rich soil and one of the most profitable for market. Pkt., **5c;** oz., **10c;** ¼ lb., **30c;** lb., **$1.00.**

190 **PAUL ROSE (Petoskey)**—A yellow fleshed sort of excellent quality. Fruits are oval, slightly ribbed and densely netted, somewhat resembling Netted Gem but larger. Flesh is orange yellow, very thick, firm and sweet and highly flavored. Vines vigorous and productive. Pkt., **5c;** oz., **10c;** ¼ lb., **30c;** lb., **$1.00.**

191 **OSAGE OR MILLER'S CREAM**—A medium salmon fleshed melon of excellent quality. Fruits are oval, dark green, slightly ribbed, tinged with grey. Flesh salmon color, thick and highly flavored. A splendid sort for late or main crop, especially for market. Pkt., **5c;** oz., **10c;** ¼ lb., **25c;** lb., **75c.**

192 **BANANA**—A long, smooth skinned variety, growing something in the shape of long squash. Fruit about 12 inches long, salmon flesh, which is very sweet, luscious and tender. Much esteemed in some localities. Pkt., **5c;** oz., **10c;** ¼ lb., **25c;** lb., **80c.**

PAUL ROSE CANTALOUPE

WATERMELON.

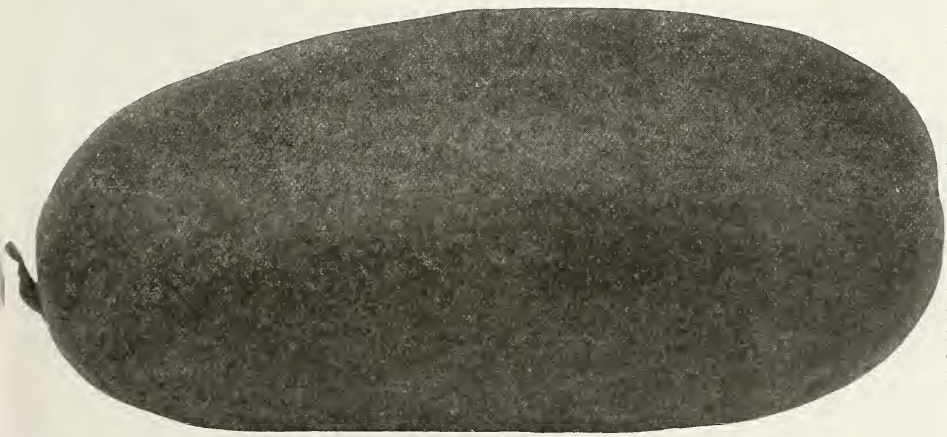
Water Melons do best on old, rich soil, which is not too freshly manured, hence when making the hills, well rotted manure should be used, and it is better to prepare them some time ahead before planting the seed. If manure cannot be obtained, use good commercial fertilizer or Peruvian Guano mixed with the soil. Some of the largest and best crops we have ever seen were produced on sod land, using 200 lbs. of fertilizer per acre in the hills.

One ounce plants 30 hills; 2 lbs. per acre. Plant early in May or for later use, in June.

CULTURE—Treat as for Musk Melon, but give more room, say 10 or 12 feet apart each way.

INSECT REMEDIES—Same as for Musk Melon.

195 **TOM WATSON**—A long, dark green melon, which has become exceedingly popular on account of its large size and general fine qualities. Vines are vigorous and productive. Flesh rich bright red, very juicy and sweet. Most suitable for nearby markets, family gardens, and a favorite with truckers, as it stands shipping well and retains its color and good quality a long time. Pkt., **5c;** oz., **10c;** ¼ lb., **25c;** lb., **75c.**



TOM WATSON WATERMELON

196 **KLECKLEY'S SWEETS**—One of the best flavored melons in cultivation and one of the best for home use or nearby markets. It is long, very dark green with thin rind. Flesh deep red, of fine delicious flavor. Pkt., **5c;** oz., **10c;** ¼ lb., **20c;** lb., **65c.**

197 **FLORIDA FAVORITE**—A well known popular sort which has long been a favorite for home use and market. Ripens early, has dark green rind, striped with light green. Flesh light crimson, exceedingly sugary, fine and tender. Very delicious and highly recommended either for home market or family use. Pkt., **5c;** oz., **10c;** ¼ lb., **20c;** lb., **65c.**

WATERMELON—Cont'd.

HALBERT'S HONEY

198 **KOLB'S GEM**—One of the older sorts producing oval melons and all large size. The rind is exceedingly hard and firm, being irregularly marked with mottled stripes of dark and light green. Flesh is bright red, solid, a little coarse but sweet. One of the best round sorts for shipping as it will handle better than almost any other sort. Pkt., **5c;** oz., **10c;** ¼ lb., **15c;** lb., **40c.**

199 **SWEETHEART**—A very popular shipping sort particularly in the South. Fruits are very large, oval, very heavy with thin rind which is of light green color, slightly veined with darker shade. Flesh bright red, firm, very sweet and the fruits remain in condition a long time after ripening. A splendid sort for market or main crop, being of fine appearance and sells readily. Pkt., **5c;** oz., **10c;** ¼ lb., **20c;** lb., **60c.**

200 **PEERLESS OR ICE CREAM**—A splendid early sort for home or market gardens. Vines moderately vigorous, hardy and very productive. Fruits are oblong, medium size, bright green finely veined with darker shade. Flesh bright scarlet, crisp and very sweet. Pkt., **5c;** oz., **10c;** ¼ lb., **20c;** lb., **50c.**

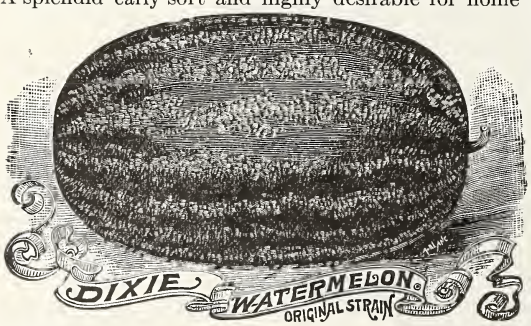
201 **GRAY MONARCH OR LONG LIGHT ICING**—Fruits uniformly long and large, oblong in shape. Color light green slightly veined with darker shade; flesh deep rich red of splendid quality. Pkt., **5c;** oz., **10c;** ¼ lb., **20c;** lb., **60c.**

202 **GYPSY (or Georgia Rattle-Snake)**—One of the most popular of the older sorts especially in the South. Fruits are large, very long, of light green color distinctly striped and blotched with darker shade. In the South it is very highly esteemed and especially desirable for growing and shipping. The rind is remarkably thin though very tough; hence, it stands shipping well. Flesh most tender, sweet and luscious. Fruits are uniformly good quality. Pkt., **5c;** oz., **10c;** ¼ lb., **20c;** lb., **60c.**

203 **HALBERT'S HONEY**—A long dark green melon of moderate size but such splendid quality that it is especially desirable for market or home use. The rind is very thin. Flesh bright crimson and so crisp and tender that ripe melons will split ahead of the knife in cutting. We especially recommend this for general planting as it is very productive, of excellent quality and a splendid seller. Pkt., **5c;** oz., **10c;** ¼ lb., **20c;** lb., **75c.**

204 **PHINNEY'S EARLY**—The earliest of all melons, producing fruits small in size but very productive. Rind is dark green, fruits oval, flesh sweet, crisp and tender. Pkt., **5c;** oz., **10c;** ¼ lb., **20c;** lb., **50c.**

205 **DARK ICING**—A round or oval shape which has long been a favorite for home use and in nearby markets. Melons are medium sized, oval, dark green in color with bright red flesh which is extremely tender and sugary. A splendid early sort and highly desirable for home use or for early crop for market. Pkt., **5c;** oz., **10c;** ¼ lb., **20c;** lb., **60c.**



206 **DIXIE**—A variety similar in marking and general characteristics to Kolb's Gem but instead of being oval it is long—hence, more desirable on the general markets. It has all of the good characteristics as a shipper. Vines vigorous and productive. Pkt., **5c;** oz., **10c;** ¼ lb., **15c;** lb., **40c.**

207—**MAMMOTH IRONCLAD**—One of the older sorts which still retains its popularity. It is oblong, almost blunt points; olive green color shaded with darker green stripes. Skin is tough which makes it a good market melon. Has bright red flesh, sweet, tender and juicy. Pkt., **5c;** oz., **10c;** ¼ lb., **20c;** lb., **60c.**

208 **CUBAN QUEEN**—One of the largest oval melons. Color light green shaded with darker stripes, similar to Rattle Snake. Quality fair. One of the best for exhibition purposes. Pkt., **5c;** oz., **10c;** ¼ lb., **15c;** lb., **50c.**

209 **PRIDE OF GEORGIA**—A large, oval melon, dark green color. Good sort for market or home uses. Pkt., **5c;** oz., **10c;** ¼ lb., **15c;** lb., **50c.**

210 **CITRON**—Used for preserves and pickling, only, as the fruit cannot be eaten. The melons are small, round and will keep quite a long time; seed, red. Pkt., **5c;** oz., **10c;** ¼ lb., **20c;** lb., **50c.**

MUSTARD.

Quite popular in the Southern States for boiling as greens. The Southern Giant Curled is becoming popular for shipping. White and Black Seeded are used for pickles and medicinal purposes. Black Seeded is also used as a poultry tonic.

CULTURE—Sow broadcast or in drills 12 inches apart in March or April or in the fall in September or October. Cut when 3 inches high. One ounce sows about 80 feet of drill. An acre requires 4 to 6 lbs.

214 **SOUTHERN GIANT CURLED**—A large growing sort with succulent, pungent leaves of sweet flavor The best variety for use as greens. Pkt., **5c**; oz., **10c**; ¼ lb., **15c**; lb., **50c**; 5 lb., **40c** per lb.

215 **WHITE**—Used for greens and the seed largely used for pickles and flavoring. Oz., **5c**; ¼ lb., **10c**; lb., **25c.**

216 **BLACK**—Oz., **5c**; ¼ lb., **10c**; lb., **25c.**

HERBS.

Most of these should be sown in April, and large ones can be transplanted when large enough. The seed is small and should be sown in drills and firmed down. Keep clean of weeds. Most of them are to be cut when in bloom, wilted in the sun, and dried thoroughly in the shade.

400 **ANISE**—A hardy Annual, grown principally for its aromatic seeds, which are used in cordials and sometimes for medicine. Pkt., **5c**; oz., **10c.**

401 **BASIL (Sweet)**—A hardy aromatic Annual used for flavoring soups and sauces, to which it gives a strong flavor. Pkt., **5c**; oz., **15c.**

402 **CARRAWAY**—Cultivated principally for its seeds, which are used for flavoring bread, cakes and confectionery. The leaves are sometimes used in soups and for liquids. Plants grow about 2½ feet high. Does not seed until the second year. Pkt., **5c**; oz., **10c.**

Carraway Seed for Flavoring—Oz., **5c**; ¼ lb., **10c**; lb., **20c.**

403 **CORIANDER**—The seeds are used mainly for flavoring confectionery. Pkt., **5c**; oz., **10c.**

404 **DILL**—A popular aromatic annual Herb which is largely used for seasoning pickles, sauces, soups, etc. Pkt., **5c**; oz., **10c**; ¼ lb., **20c**; lb., **60c.**

405 **FENNEL (Sweet)**—A hardy Perennial, the seeds of which are used for flavoring sauces, especially for fish; as well as confectionery and cakes. Pkt., **5c**; oz., **10c.**

406 **LAVENDER**—A hardy Perennial growing about 2 ft. high. The flowers of which are used for perfumes. It is also distilled for making lavender water. Pkt., **5c**; oz., **20c.**

407 **MARJORAM (Sweet)**—An Annual used mainly for seasoning. Pkt., **5c**; oz., **15c.**

408 **SAGE**—One of the most extensively used plants for seasoning. It is a hardy Perennial growing about 15 to 18 inches high. Pkt., **5c**; oz., **15c**; ¼ lb., **35c**; lb., **$1.25.**

409 **SAVORY (Summer)**—A hardy aromatic Annual, largely used for seasoning, especially a dressing for soups and sausage. Pkt., **5c**; oz., **20c.**

410 **THYME**—A hardy Perennial, plants fragrant and spicy. Used for flavoring; as a tonic, also as a dressing for fresh bruises. Pkt., **5c**; oz., **30c.**

VEGETABLE PLANTS AND ROOTS.

As we grow these plants ourselves, they are always well packed and can be shipped fresh from beds on short notice.

Prices Do Not include Prepayment by Mail or Express.

ASPARAGUS ROOTS—Two-year-old.

	Per 50	Per 100	Per 1,000
Conover's Collossal	$0.50	$ .80	$6.00
Palmetto	.60	1.00	6.50

EARLY CABBAGE PLANTS.
(Ready about April 1st.)

	Per 100	Per 1,000
Early Jersey Wakefield	$0.50	$4.00
Louisville Drumhead	.50	4.00

LATE CABBAGE PLANTS.
(Ready in June.)

Large Late Drumhead	.30	2.50
Premium Flat Dutch	.30	2.50

CAULIFLOWER
(Ready April 1st.)

	Per doz.	Per 1000
Henderson's Showball	$0.25	$1.50
Early Dwarf Erfurt	.25	1.50

CELERY PLANTS.
(Ready June to August

	Per 100	Per 1,000
White Plume	$0.50	$3.50
Golden Heart	.50	3.50
Golden Self-Blanching	.50	3.50

CHIVES.

	Each	Per doz.
Good clumps	$0.10	$1.00

EGG PLANTS.
(Ready in May.)

	Per doz.	Per 100
New York Improved	$0.40	$2.50

HORSE RADISH SETS.

Per Dozen	$0.15
Per Hundred	.75
Per Thousand	6.00

PEPPER PLANTS.

	PER doz.	Per 100
Large Bell or Bull Nose	$0.25	$1.50
Ruby King	.25	1.50

RHUBARB ROOTS.
(Ready April 1st.)

	Each	Per doz.
Small Roots	$0.08	$0.75
Large Clumps	.25	2.50

SWEET POTATO PLANTS.
(Ready early in June.)

	Per 100	Per 1,000
Nasemond Yellow	$.30	$2.50
Jersey Yellow	.30	2.50
Red Bermuda	.35	3.00
Southern Queen	.35	3.00

TOMATO PLANTS
(Ready about May 1st.)

Acme, Beauty, Stone, Dwarf Champion, Buckeye Trucker's Favorite, Ponderosa.	Per doz.	State, Per 1000
Transplanted	$0.20	$1.50
From hot-beads transplanted	.15	1.00

MUSHROOMS IN A BED

MUSHROOM SPAWN.

Mushrooms can be grown in cellars, sheds, under benches in green houses or hot beds. They are also planted outside in pastures or sod. It is a very profitable crop both for forcing or a field crop. Our cultural instructions are somewhat limited but we can furnish a booklet of more extended information on "How to Grow Mushrooms." Price, **10c.**

One brick will spawn about ten feet square.

CULTURE—In preparing a mushroom bed, take three parts fresh stable manure, free from straw, and one part of good pasture soil. Mix thoroughly together and let it stand until the heat has sunk to about 90 degrees. Make the bed from this mixture about four feet wide, eight inches deep, and any desired length. As soon as the temperature of the bed is about 70 or 80 degrees, the spawn may be inserted in pieces about the size of a walnut, and six inches apart each way. When the spawn is diffused through the whole bed, which will be in about ten days from planting, cover with two inches of fine loam and press down firmly. Over this place a layer of straw about four inches thick. Do not water unless the surface gets extremely dry, and then only with water at a temperature of 80 degrees. When gathering the crop, twist them off at the roots and do not use a knife. Cover the hole with soil to keep insects away from the root. Mushrooms can be grown in a great variety of situations; under the benches in a green house, a dark room, cellar, stable or elsewhere.

217 **ENGLISH MUSHROOM SPAWN**—Well known and popular. Put up in bricks weighing about 1¼ lbs. Per brick, **15c;** 5 bricks, **60c;** 100 lbs. lots, **$9.00.**

218 **PURE CULTURE MUSHROOM SPAWN**—Superior to the English and much preferred by commercial growers. Per brick, **25c;** 5 bricks, **20c** per brick; 100 lbs., **16c** per lb.

Postage on Mushroom Spawn, **6c** per brick extra.

NASTURTIUM.

This is grown not only as an ornamental plant, but the green seed pods are very much esteemed, making excellent capers and delicious pickles.

219 **TALL MIXED**—The best variety for kitchen garden purposes; grows 4 to 6 ft. high and the vines can be supported, if desired, by stalks, frames or brush. Pkt., **5c;** oz., **10c;** ¼ lb., **25c;** lb., **80c.**

WHITE VELVET OKRA

OKRA OR GUMBO.

One of the most popular Southern vegetables and largely used for flavoring soups, stews, gravies and canned tomatoes.

CULTURE—Sow in drills 2½ feet apart after the weather has become settled and warm. Thin out to 8 inches apart in rows. To keep for winter, slice the pods when young in narrow rings and string or hang in the shade to dry.

One ounce sows about 40 feet. 12 to 15 lbs. per acre. Plant in April or May. Matures in 60 to 70 days from planting.

220 **WHITE VELVET**—An early maturing and very productive variety growing about 3½ feet high. Pods white, long, smooth and very tender. This is not so deeply ribbed as the green sorts and is very popular in some sections. Pkt., **5c;** oz., **10c;** ¼ lb., **20c;** lb., **50c.**

221 **DWARF PROLIFIC**—One of the most popular sorts in the South, growing 3 feet high, producing large pods deeply ribbed, tender, fine flavor. Pkt., **5c;** oz., **10c;** ¼ lb., **15c;** lb., **45c.**

222 **TALL GREEN**—A superior and prolific sort growing 4 to 5 feet high with very large, long, deep green pods. Makes an excellent and ornamental screen in gardens. Pkt., **5c;** oz., **10c;** ¼ lb., **15c;** lb., **45c.**

ONION SETS.

There are three distinct classes of these. **Potato or Hill** onion sets can be planted in the fall from August to November and produce both green spring onions, large onions and sets. **Perennial or Egyptian Top** onion sets are planted in the fall or very early in the spring and produce green spring onions early in the spring. **Bottom Sets** or regular onion sets of commerce are small onions which were previously grown from seed. These, set out early in the spring or in the South in the fall, produce one large onion from each set, towards the end of June or first of July. Pickling onions (which is a larger size bottom set) are used in some localities for fall planting to produce early green spring onions. All onion sets are hardy and can be set in the open ground as early as the weather will permit. They are usually planted in rows 15 inches apart—4 inches apart for small sets and 6 to 8 inches apart for potato sets. Potato onion sets can also be planted in the spring. It takes about 16 bushels of bottom onion sets per acre, and 20 to 25 bushels of potato onion sets, according to the size and distance apart. Cultivate with hoe until maturity.

If to be sent by mail, add 6c per qt. for postage.

Prices of onion sets are subject to market changes.

YELLOW DANVERS—Probably the most largely planted of all onion sets, producing an early crop of fine quality onions. Qt., **15c;** 4 qts., **50c;** pk., **90c.** Bushel prices on application.

WHITE OR SILVER SKIN—Pure white of mild flavor and usually preferred for private gardens. Qt., **20c;** 4 qts., **60c;** pk., **$1.15.** Bushel prices on application.

YELLOW POTATO OR HILL—A mild, yellow variety, producing several large onions and clusters of sets. Lb., **15c;** 4 lbs., **50c;** 8 lbs., **90c.** Bushel prices on application.

EGYPTIAN OR PERENNIAL TREE (Called Top Onion Sets)—For spring or summer green onions. Lb. **10c;** 3 lbs., **25c;** 10 lbs., **75c;** bu. (28 lbs.), **$1.75.**

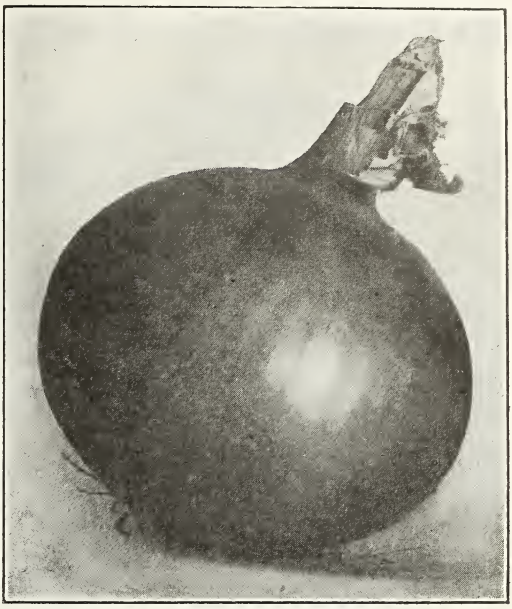
ONION.

One of the most nutritious and healthy of vegetables, having excellent medicinal qualities and most useful for flavoring salads, soups, meats, etc. It can be produced easily from either sets or seed and is one of the most satisfactory vegetables in the garden.

A good crop of onions is 400 to 800 bushels per acre. A good crop of onion sets 300 to 400 bushels per acre.

CULTURE—Growing Large Onions from Seed—Seed is sown in rows 15 inches apart as early in the spring as ground can be worked and covered about ½ inch deep. The Planet Junior Seed Sower is the implement for this and it requires 4 to 5 pounds per acre. Cultivate with a wheel hoe as soon as plants are up and hand-weed. After getting a good start thin onions to about 4 inches apart. Constant weeding and cultivation are required throughout the season. Rich soil, most heavily manured is required to grow large crops of onions. The mucklands of Ohio, Indiana and Illinois are particularly suited to this crop but fertilization has to be kept up to produce a large and profitable crop. Onions grown from seed mature much later than those grown from sets. For further information on Onion growing we can supply a book **"Onion Culture"** by **Greiner, for 50c.**

Growing Sets—To produce commercial Onion Sets known as **Bottom Sets,** the seed is sown in rows 11 to 12 inches apart in fine clean soil at the rate of 40 to 60 lbs. per acre. Cultivate with a wheel hoe and hand weed. The sets are ready for pulling in July and are cleaned and stored in an airy loft. For pickling onions, one ounce sows 150 ft.; 15 lbs. per acre.



OHIO YELLOW GLOBE

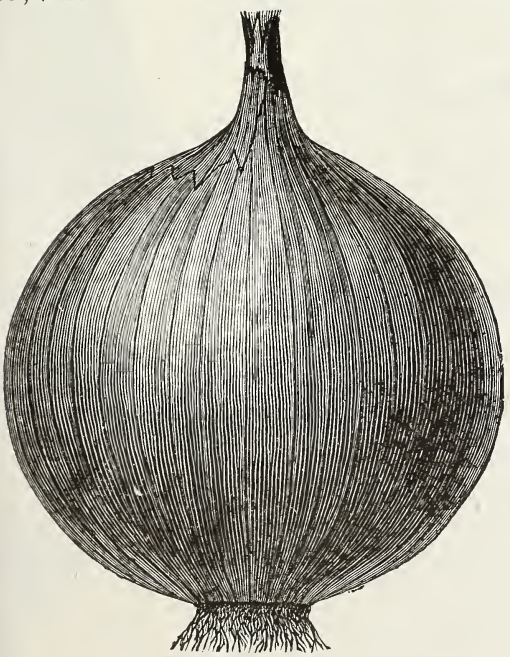
230 **LARGE RED WETHERSFIELD**—A splendid red variety, very popular in the East. Bulbs somewhat flattened, thick and very large. Skin deep purplish red, flesh white tinged with purple, moderately fine grained, strong but pleasant flavor. It is medium early and well suited to rich soils. Is a good keeper and productive. Pkt., **5c;** oz., **15c;** ¼ lb., **35c;** lb., **$1.15.**

231 **YELLOW FLAT DANVERS**—An early or main crop variety of medium size, light coppery yellow color. Bulbs flattened but are quite thick with small necks. Ripen down evenly and keep well. This is the standard and most popular sort sown for yellow sets. Pkt., **5c;** oz., **15c;** ¼ lb., **35c;** lb., **$1.00.**

232 **YELLOW DUTCH OR STRASBURG**—Similar to the well known Yellow Danvers except that it is somewhat lighter in shade and very much esteemed in the East. Pkt., **5c;** oz., **15c;** ¼ lb., **30c;** lb., **$1.00.**

233 **YELLOW GLOBE DANVERS**—One of the most extensively grown yellow onions. Bulbs are of large size, uniformly globe shape with small necks. Ripen evenly. Flesh creamy white, crisp, mild and excellent flavor. Onions have a yellow coppery color, showy and handsome. Pkt., **5c;** oz., **15c;** ¼ lb., **40c;** lb., **$1.25.**

234 **OHIO YELLOW GLOBE**—A very much esteemed and popular sort grown extensively in this state. Particularly suited to rich soils. Onions somewhat more flattened at the base than Yellow Globe Danvers and more blunt at the top. Color rich yellow tinged with orange. Flesh creamy white, mild and fine flavor. One of the best for main crop planting and shipping as it is an excellent keeping sort. Pkt., **5c;** oz., **15c;** ¼ lb., **40c;** lb., **$1.25.**



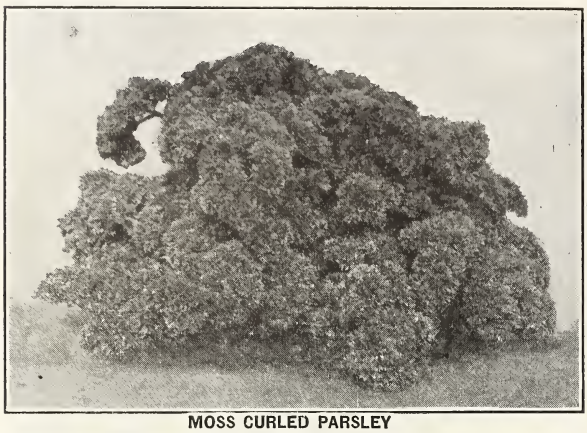
PRIZE TAKER ONION

235 **AUSTRALIAN BROWN**—A very hardy variety of medium size which is extremely early and of good quality. The outer shin is darker in color than Yellow Globe Danvers. Onions are very solid, excellent quality and will stand handling better than almost any sort. Pkt., **5c;** oz., **15c;** ¼ lb., **30c;** lb., **90c.**

236 **PRIZE TAKER**—A large European sort which has become thoroughly acclimated to this country and produces enormous onions the first season from seed. Skin is yellowish brown; flesh creamy white, very mild, tender and of excellent quality. By early sowing in hot beds and transplanting, Prize Taker Onions as large as 4 lbs., have been grown in a season. Its large size and attractive appearance make it a popular sort for selling on fruit stands at fancy prizes. Pkt., **5c;** oz., **15c;** ¼ lb., **40c;** lb., **$1.25.**

237 **SILVER SKIN OR WHITE PORTUGAL**—A well known and favorite variety making medium size onions of mild flavor with beautiful, clear white skin. Largely used for sets and pickling onions. Mature 10 days earlier than White Globe. Bulbs are nearly round when of bunching size but somewhat flattened when mature. One of the best flattened sort for general use. Pkt., **5c;** oz., **15c;** ¼ lb., **50c;** lb., **$1.50.**

238 **WHITE GLOBE**—A fine early or main crop sort for home gardens. Flesh is firm, fine grained, white, mild and more desirable for cooking than the yellow or red sorts. Bulbs are globe shape, full at the shoulder, round at the base, keep well and a good market variety. Pkt., **5c;** oz., **20c;** ¼ lb., **60c;** lb., **$2.00.**



MOSS CURLED PARSLEY

PARSLEY.

Easily grown and useful for so many purposes, such as garnishing, seasoning salads and for ornamental purposes. Grown in the garden as edging it is both ornamental and profitable.

CULTURE—Seed is sown in rows ½ inch deep and one foot apart. Cover firmly but not deep. As it is slow to germinate, usually taking 3 to 4 weeks, soaking in water is desirable. One ounce sows 150 ft. of drill. For winter growing it can be sown or transplanted to cold frames or to hot beds and is usually profitable.

241 **CHAMPION MOSS CURLED**—A beautifully curled and crimped variety which is much preferred. It is vigorous, compact in growth and excellent for garnishing—a handsome decorative plant. One of the most popular for market and home gardens. Pkt., **5c**; oz., **10c**; ¼ lb., **20c**; lb., **60c.**

242 **HAMBURG OR ROOTED**—This produces an edible root resembling a small parsnip both in color and shape. Flesh white, flavor similar to Celeriac. Foliage is about the same as plain parsley. Roots are extensively used for flavoring soups and stews and can be dug late in the fall and stored in sand for winter use. Pkt., **5c**; oz., **10c**; ¼ lb., **25c**; lb., **75c.**

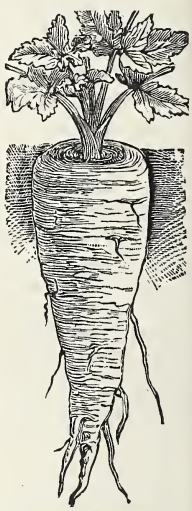
243 **PLAIN**—A hardy variety having very dark green leaves which are flat, deeply cut but not curled. It is a little stronger in taste and much esteemed for flavoring soups, stews, as well as for drying. Pkt., **5c**; oz., **10c**; ¼ lb., **20c**; lb., **50c.**

PARSNIPS.

A popular vegetable for fall and winter use and of wonderful value for stock feeding. On rich loamy soil produces immense crops, more nutritious than turnips and very valuable for dairy cattle. It will remain in the ground without protection all winter and can be dug as required until they begin to go to seed in the spring; or if desired, store in pits or cellars.

CULTURE—Sow in April in drills 18 inches apart, covered lightly. When the plants are about 2 inches high, thin out from 4 to 6 inches apart. One ounce will sow 200 ft. of drill. 5 to 6 lbs. to the acre.

244 **SUGAR OR HOLLOW CROWN (Guernsey)**—One of the best and most popular varieties for the table. Roots long, uniform in shape, have a smooth white skin, tender, and of good quality. Pkt., **5c**; oz., **10c**; ¼ lb., **20c**; lb., **50c.**



SUGAR PARSNIP

VIRGINIA PEANUTS

245 **LONG WHITE**—This variety is very hardy and will keep well throughout the winter without protection. The roots are long, smooth, creamy white, tender and fine flavor. Splendid for table use and suitable for stock feeding. Pkt., **5c**; oz., **10c**; ¼ lb., **20c**; lb., **50c**; 5 lbs. and over, **40c** per lb.

PEANUTS.

Every garden should grow a few of these especially for the children. They are easily and can be successfully grown.

CULTURE—Shell the nuts and plant in April or May in drills 2 to 2½ ft. apart, dropping 2 seeds 12 to 15 inches apart in the drills. Work occasionally flat keeping down the weeds.

If to be sent by mail add 10c per qt. for postage.

246 **IMPROVED VIRGINIA**—Large size nuts which are very popular and a fine productive strain. Qt., **15c**; 4 qts., **40c**; bu., **$2.00.**

247 **SPANISH**—A very prolific variety producing small size kernels which are very rich and fine flavor. In some sections largely grown for hog feeding. Both vines and roots are pulled up, fed green or cured, making excellent dry food. Qt., **15c**; 4 qts., **45c**; bu., **$2.00.**

Black Eye Peas.

These, while termed "Peas" are really a bean, but they have been so long known as Peas in the east and south, that the name is still applied. Vines are vigorous, growing 2 to 2½ ft. high and bear long, slender pods, 8 to 10 inches in length, which are close crowded with seeds. They are used both in a green state and dry and are far superior to White Beans, being more tender and better flavored. They are prepared for the table by boiling similarily to White Navy Beans and can be baked after boiling, with strips of bacon on the top.

CULTURE—Plant in May or June in rows 2½ ft. apart, dropping two beans 10 or 12 inches apart in the row. Cultivate until they begin to bloom.

248 **LARGE BLACK EYE PEAS**—Pkt., **5c**; ½ pt., **10c**; pt., **15c**; qt., **25c**; 4 qts., **75c.** Bushel prices on application. Add **5c** per pint or **10c** per qt. if by mail.

PEAS.

GARDEN VARIETIES.

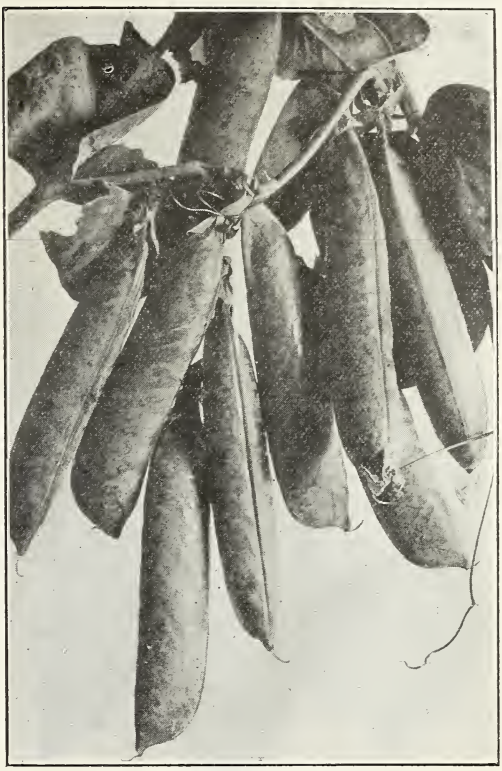
One of the most popular crops in the home garden and usually a profitable one for market gardeners where labor for picking can be readily obtained. One pint sows 75 ft., 1½ bu. per acre. The earliest sorts can be planted just as soon as the ground is in condition to work. Wrinkled Varieties a little later as they are tender. For succession, plant different sorts. For fall crop sow in August.

One pint planted every two weeks will yield a succession and is enough for a medium sized garden.

CULTURE—Peas succeed best in light, rich, loamy soil which has been manured the previous season. Peruvian Guano or good commercial fertilizer in the drills mixed with the soil will give excellent results. Sow about one lb. per 100 ft. or 200 lbs. per acre. The early dwarf varieties can be planted in rows 2 ft. apart. The tall varieties in rows 3 ft. apart. Peas can be staked with sticks or wire netting on stakes. Tall varieties yield more abundantly than dwarf. Cultivate and keep clean, working the earth toward the vines rather than away from them.

Packets and ½ pints postpaid. If to be sent by mail add 5c to pint prices and 10c to quart prices.

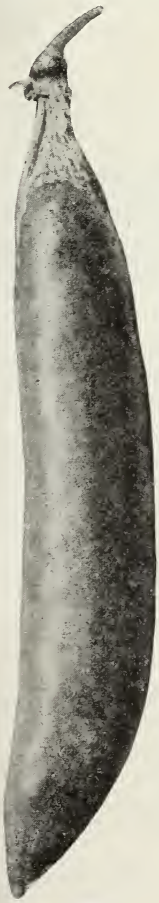
For Zone Rates. 1 pint weighs about 15 oz. 1 qt about 30 oz.



J. C. McC. EXTRA EARLY PEAS

EARLY ROUND OR SMOOTH

250 **J. C. McC.'s EXTRA EARLY**—One of the best strains of extra early peas; producing abundantly. Vines grow 2 to 2½ ft. high; pods 3 to 3½ inches long, well filled with fine delicious quality peas. Not only is this probably the earliest of all garden sorts but its yield is so abundant that it is the most profitable variety of all for market gardeners, in addition to being the best early sort for home gardens. Seed is white, smooth, medium size. Vines thrifty, vigorous, robust and extremely productive. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **25c;** 4 qts., **75c;** bu., **$5.00.**



CLAUDIT PEAS

251 **ALASKA**—A favorite sort with Southern truckers, producing long straight pods which will stand shipping, remain green longer than white seeded sorts. The seed is blue, medium size. Vines about 2½ ft. high, fairly vigorous and usually produce good yields. Pods long, straight and attractive appearance. This has long been a popular sort, is of fair quality and well known. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **25c;** 4 qts., **70c;** bu., **$4.50.**

252 **NEW CLAUDIT or MAMMOTH ALASKA**—A very superior variety for market gardeners and truck growers. Peas are the same color as the Alaska but average about 1½ times as large and pods about in the same proportion. In quality it is fully equal to any smooth pea. Pods remain green a long time after picking so that it is excellent for shipping. Vines usually 2½ ft. high, bearing 7 to 9 peas to the pod. We strongly recommend this sort for extensive planting as wherever grown it supersedes Alaska by market growers. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **25c;** 4 qts., **75c;** bu., **$5.00.**

253 **FIRST AND BEST**—A popular, extra early Pea, producing good crops and satisfactory in nearly all sections. Vines 2½ ft. high, producing pods 3 to 3½ inches long. Sold under the name of Philadelphia Extra Early, Improved Daniel O'Rourke, Rural New Yorker, Extra Early Kent and a dozen similar names. Pkt., **5c;** pt., **10c;** qt., **20c;** 4 qts., **70c;** bu., **$4.50.**

253A **PETIT-POIS or FRENCH CANNER**—These are very much esteemed on account of their small size and delicious flavor. They bear moderately early; vines are vigorous, prolific and grow 3 to 4 ft. in height Pods are long, slim and contain 8 to 10 small peas of tender, delicate quality. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **25c;** 4 qts., **70c;** bu., **$4.75.**

254 **TOM THUMB**—A smooth white seeded sort, dwarf growth. Vines averaging 10 to 12 inches high, very hardy and fairly prolific but especially valuable in that they do not require sticking. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **25c;** 4 qts., **85c;** bu., **$5.50.**

Unless ½ pints are quoted in Peas we do not supply any of this size packages.

PERUVIAN GUANO used 150 to 200 lbs. per acre, will produce very large yields of peas

PEAS—EARLY WRINKLED SORTS.

Add 5c to pint and 10c to quart prices if by mail. Or for Zone rates, one pint weighs about 15 oz., one qt. about 30 oz.

GRADUS OR PROSPERITY PEAS

These are of very much finer and superior quality to the Smooth sorts, consequently are much to be preferred for private gardens or market uses, except for very earliest crops. They are not quite as hardy as the smooth varieties—hence, should be planted just a little later.

255 **GRADUS (or Prosperity)**—One of the very best early wrinkled large podded peas. The pods are fully as long as Telephone. Vine similar in appearance and does not grow so tall, being of medium height about 3 to 3½ feet. The Pods are 4 to 4½ inches long, pointed, handsome and one of the most attractive of the early wrinkled sorts. Peas very large, splendid quality and a beautiful light green color. This has been one of the most popular varieties in cultivation. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **25c;** 4 qts., **90c;** bu., **$6.25.**

256 **THOMAS LAXTON**—A comparatively new early wrinkled sort of superior merit. Vines vigorous, growing about 3 ft. high; have dark, vigorous foliage, similar to Gradus but hardier and more productive. Pods about 4 inches long, square ends, similar to Champion of England but larger, longer and darker. Peas are fine quality and it is destined to become one of the most popular of the early sorts on account of its productiveness. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **25c;** 4 qts., **90c;** bu., **$6.50.**

257 **LAXTONIAN**—One of the largest podded of the dwarf wrinkled peas. Pods are about 4 inches in length, of a beautiful dark green color, similar to Gradus in shape, of splendid quality and mature a little earlier. Vine averages 15 to 18 inches in height, vigorous, productive and has dark green foliage. Pkt., **5c;** ½ pt., **10c;** pt., **20c;** qt., **35c;** 4 qts. **$1.10;** bu., **$8.00.**

258 **LITTLE MARVEL**—An extra early dwarf wrinkled sort particularly suited to home gardens. Vines average 15 to 18 inches high, vigorous, dark green foliage. Peas are borne together in pairs of twos. Though comparatively a new sort it has become exceedingly popular on account of its large productive yield. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **30c;** 4 qts., **$1.00;** bu., **$7.00.**

259 **AMERICAN WONDER**—A favorite dwarf, early, wrinkled Pea which is highly esteemed and splendid for family use. Vines about 9 inches to 1 ft. high, covered with well filled pods medium size, about 2¾ inches long, containing 5 to 8 large, exceedingly sweet, tender peas. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **25c;** 4 qts., **90c;** bu., **$6.00.**

260 **NOTT'S EXCELSIOR**—A few days later than the American Wonder. Pods about one-quarter larger. It is remarkably hardy and can be planted almost as early as smooth sorts. Height 1 to 1½ ft. One of the best for home gardens and a profitable variety for market gardeners. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **25c;** 4 qts., **90c;** bu., **$6.00.**

261 **SUTTON'S EXCELSIOR**—A very large podded dwarf variety. It is exceedingly vigorous, unsurpassed in quality; pods mature nearly as early as Nott's Excelsior but are broader and about the same length. Height 15 to 18 inches. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **30c;** 4 qts., **$1.00;** bu., **$6.50.**

262 **McLEAN'S LITTLE GEM**—This has long been a favorite among early dwarf peas. It matures a little later than American Wonder, is somewhat taller in growth and a little more prolific. Vines vigorous and productive, growing 15 to 18 inches high; pods 2¾ inches long, crowded with peas of fine quality. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **25c;** 4 qts., **80c;** bu., **$5.50.**

MEDIUM CROP VARIETIES.

263 **McLEAN'S ADVANCER**—A productive variety largely used by canners and market gardeners. Vines 2½ to 3 ft., bearing long, broad pods about 3 inches long, of fine appearance. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **25c;** 4 qts., **75c;** bu., **$5.50.**

264 **BLISS' EVERBEARING**—A popular sort, with stout vines of medium height, about 2½ ft. high bearing at the top 6 to 10 broad pods of medium size about 3 inches long. If picked as they mature they grow out more branches, thus keeping up succession. Peas are fine flavor, tender and superior quality. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **25c;** 4 qts., **75c;** bu., **$5.50.**

265 **DAISY OR DWARF TELEPHONE**—Similar in general characteristics to the well known Telephone. Pods 4½ to 5 inches long, dark green; peas large, of superior quality, tender and sweet. Vines about 3 ft. high. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **30c;** 4 qts., **$1.00;** bu., **$6.50.**

PEAS—CONT'D.

LATE OR MAIN CROP SORTS.

266 **DUKE OF ALBANY**—A very large wrinkled variety, similar to Telephone in growth but darker in color of foliage and pods. Vines tall, about 4½ to 5 ft., vigorous, strong growing. Pods large size, 4½ to 5 inches; peas tender and sweet. On account of its productiveness, dark green color and general attractive appearance, it is destined to become one of the leading market sorts and its fine qualities recommend it for home use for main crop. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **25c;** 4 qts., **90c;** bu., **$6.25.**

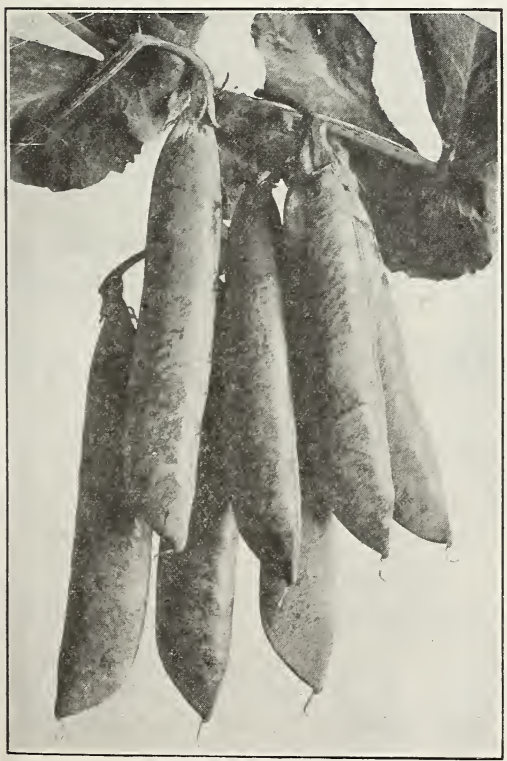
267 **IMPROVED PRIDE OF THE MARKET**—A medium early pea bearing very long, pointed pods of dark green color. Vines medium height, 2½ to 3 ft. vigorous and very productive. A favorite sort in many sections for market. Peas blue, almost smooth and of fair quality. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **25c;** 4 qts., **85c;** bu., **$5.50.**

268 **TELEPHONE**—One of the leading peas with market gardeners on account of its vigorous, tall growth and productiveness. Vines about 4 ft. high, foliage light green, producing an abundance of pointed pods, very large and light green. Peas large, tender, very sweet, excellent flavor. A splendid sort for home gardens and profitable for market. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **25c;** 4 qts., **85c;** bu., **$6.00.**

269 **PRINCE EDWARD**—An English strain of the Telephone type, which is selected and bred especially for the size of the pods, which are so large that they are magnificent. The Peas are of good quality, have a fine green, splendid flavor, and the vines bear very heavy crops. For exhibition purposes or market it is especially desirable. Vines 4 to 4½ ft.; pods 4½ to 5 inches; long, dark green. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **30c;** 4 qts., **$1.00;** bu., **$6.50.**

270 **CHAMPION OF ENGLAND**—One of the older varieties which still retains its popularity on account of its productiveness and general good qualities. Vines tall, 4 to 5 ft., pods large about 3 inches long, borne in abundance. Peas tender and exceedingly sweet. A favorite sort for home gardens. Pkt., **5c;** ½ pt., **10c;** pt., **15c;** qt., **25c;** 4 qts., **75c;** bu., **$5.25.**

DUKE OF ALBANY



CHAMPION OF ENGLAND

271 **WHITE MARROWFAT**—Vines about 3½ ft. high. Vines exceedingly productive. Pods long, well filled; peas smooth, rather coarse quality. Sown in many localities for market but not satisfactory for home gardens. Pkt., **5c;** pt., **10c;** qt., **20c;** 4 qts., **60c;** bu., **$4.25.**

272 **BLACK EYE MARROWFAT**—More prolific than the White Marrowfat. Vines somewhat stronger and about the same height. Quality coarse, valuable only for market purposes. Pkt., **5c;** pt., **10c;** qt., **20c;** 4 qts., **60c** bu., **$4.00.**

273 **MELTING SUGAR (Edible Pods)**—These are used in the same manner as Snap or String Beans, the pods and peas being sliced and boiled. Pods very large, 4½ inches long, broad, curved and twisted. They are when young, very tender, stringless and fine flavored. Vines are tall, 4½ to 5 ft. high, with light foliage; are very strong growing and prolific. We strongly recommend more extensive planting of these fine quality peas. They are very popular in Europe and should become more generally known in this country. Pkt., **5c;** ½ pt.,**10c;** pt., **20c;** qt., **35c;** 4 qts., **$1.25.**

Legume Inoculation for Peas.

Excellent results will be obtained by treating the seeds of Peas with Inoculation Bacteria before planting. It can be easily done. We have had it put up in convenient size for small gardens. **Price, small bottle** (treats from 1 quart to 1 peck), **25c. Acre size, 50c;** 5 acres for **$2.50.**

FOR FIELD PEAS SEE FARM SEEDS.

PEPPER.

CULTURE—For earliest crop sow in hot bed in February or March and transplant to open ground in May, setting plants about 15 inches apart in rows 2½ ft. apart. Later crops can be sown in cold frames. Cultivate and keep free of weeds. Peruvian Guano or some good commercial fertilizer applied broadcast around the plant and hoed in when they are about 6 inches high will produce an enormous increase and improvement in yield.

One ounce makes from 1200 to 1500 plants.

CHINESE GIANT PEPPER

275 **CHINESE GIANT**—An enormous variety sometimes attaining 6 inches in diameter. It is very even in shape, flesh thick and sweet. Very handsome and of superior quality for stuffing. Plants are vigorous and fairly prolific. Very highly recommended for home use and one of the most profitable to grow for market purposes. Pkt., **5c;** oz., **40c;** ¼ lb., **125c;** lb., **$4.00.**

276 **LARGE BELL OR BULL NOSE**—A large early sort of mild flavor. Plant vigorous, 2 feet high, very productive, and ripens its crop early and uniformly. A splendid sort for salads, mangoes and for stuffing purposes. Color deep green which becomes bright crimson when ripe. Pkt., **5c;** oz., **20c;** ¼ lb., **60c;** lb., **$2.00.**

277 **RUBY KING**—A very large and attractive sort, deep green color when young, bright red when ripe. Flesh thick and mild flavor. One of the best table sorts. Pkt., **5c;** oz., **20c;** ¼ lb., **60c;** lb., **$2.00.**

278 **LONG RED CAYENNE**—A well known medium early sort having slender, twisted and pointed fruits about 4 inches long. Extremely strong and pungent—hence, valuable for seasoning. Generally known as Lady Finger Pepper. Pkt., **5c;** oz., **20c;** ¼ lb., **50c;** lb., **$1.75.**

279 **SWEET MOUNTAIN (or Spanish)**—Late maturing and an attractive sort. Fruits very large and long, frequently 7 inches in length and 2 inches in diameter; flesh mild, very thick and excellent quality. Pkt., **5c;** oz., **20c;** ¼ lb., **60c;** lb., **$2.00.**

280 **GOLDEN DAWN**—A good main crop sort, thick flesh, sweet and tender, valuable for salads or stuffing. Color bright green when young, orange yellow when ripe. Pkt., **5c;** oz., **20c;** ¼ lb., **50c;** lb., **$1.75.**

281 **RED CHILI**—Pods about 2 inches in length. ⅛ to ½ inch in diameter, tapering to a sharp point. Exceedingly pungent—hence, valuable for flavoring and for Tabasco Sauce. The small bright red pods are borne in great profusion making it an ornamental plant for the garden. Pkt., **5c;** oz., **20c;** ¼ lb., **50c;** lb., **$1.75.**

PUMPKIN.

These make excellent food for stock and can be grown in corn fields at practically no extra expense. We urge larger planting, as they are very nutritious and afford a change in ration.

CULTURE—Generally planted in corn after the last working and gathered after corn has been shocked. For field crop plant in May or June in hills 8 ft. apart, about 8 to 10 seed to the hill and cultivate until the vines get strong; then thin out leaving 2 or 3 of the strongest plants in each hill.

One ounce plants 20 to 30 hills according to the size of the seed. Two or three pounds to the acre.

283 **KING OF THE MAMMOTHS**—An enormous flattened variety sometimes attaining 100 lbs in weight. It is especially desirable for exhibition purposes, Halloween parties and will find ready sale in most large cities at good prices. Pkt., **5c;** oz., **15c;** ¼ lb., **35c;** lb., **$1.00.**

284 **JAPANESE PIE**—Fruit medium size nearly round. Skin light yellow, covered with fine grained netting. Flesh salmon, very thick, sweet, fine flavor and one of the best sorts for cooking. Pkt., **5c;** oz., **10c;** ¼ lb., **25c;** lb., **75c.**

285 **TENNESSEE SWEET POTATO**—Medium size with creamy yellow color with light green stripes. Flesh thick, fine grained, dry, brittle and of excellent flavor. Unsurpassed for pies and custards. Pkt., **5c;** oz., **10c;** ¼ lb., **25c;** lb., **75c.**

286 **CASHAW or CROOK-NECK**—Fruit fairly large with crooked neck. Skin creamy white with green stripes. Flesh yellow, very thick, rather coarse but sweet. A productive and popular sort in most sections. Pkt., **5c;** oz., **10c;** ¼ lb., **20c;** lb., **60c.**

287 **LARGE CHEESE**—A popular sort in this section for table uses and stock. Fruits somewhat flattened; skin mottled light green and yellow. Flesh yellow and of tender quality. Pkt., **5c;** oz., **10c;** ¼ lb., **15c;** lb., **50c.**

288 **KENTUCKY FIELD**—Grown generally throughout the central section for stock feeding. Fruits very much flattened, creamy yellow color; flesh orange. Very productive. Oz., **5c;** ¼ lb., **15c;** lb., **35c;** 5 lbs. and over, **25c** per lb.

289 **CONNECTICUT FIELD**—A small round variety, popular in extreme northern sections on account of its earliness. Oz., **5c;** ½ lb., **15c;** lb., **35c.**

SELECT SEED POTATOES
CHOICE NORTHERN GROWN STOCKS.

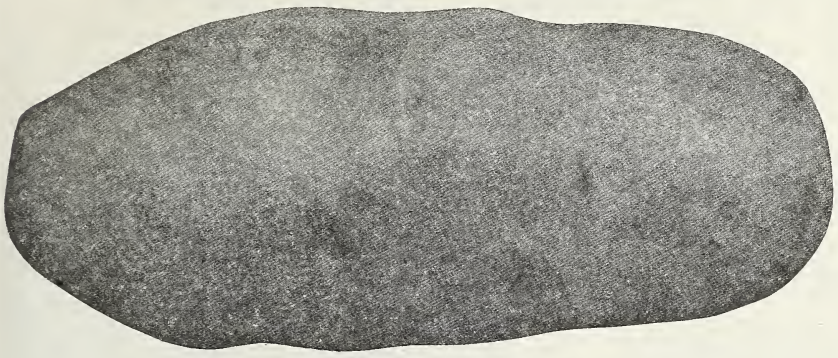
These are grown for us in the extreme northern parts of Minnesota, Wisconsin and Michigan and can be relied on as being true to name and first quality.

Prices on Potatoes are constantly changing, subject to market fluctuations. Please write for current market prices when ready to purchase.

All potatoes are sold in 10 peck sacks and prices include sacks. If wanted in barrels add 20% to the prices of the 10 peck sacks and this will include extra quantity of potatoes and barrels.

CULTURE—Potatoes are planted in rows 27 to 30 inches apart, dropping the potatoes 10 to 12 inches apart in the rows. Peruvian Guano or some other good commercial fertilizer should be used in the drills even if the land is heavily manured as it will pay wonderfully well. It takes about 1 pound of fertilizer to 30 to 40 feet of drill, 400 to 600 lbs. per acre. It takes 9 to 12 bushels to plant an acre according to size of potatoes and distance of rows apart. Plant for early crop as soon as the ground can be gotten in condition. For late crop, in July or 1st of August is best.

INSECT REMEDIES—For the Potato Bug, Paris green is most effective remedy and on large areas had better be applied with a Leggett's Champion Paris Green Gun or Beetle Duster. For a small garden, mixing with land plaster, 1 lb. to 100 lbs. of plaster and dusting; or if sprayed use one pound of Paris Green to 100 gallons of water. Slug Shot can be used in small gardens if desired. For preventing Blight and increasing growth of vines and yield of potatoes, spray with Bordeaux Mixture two or three times. It has wonderful results. Paris Green can be used mixed with it if desired.



EARLY ROSE POTATO

EARLY OHIO—10 days earlier than Early Rose. The tubers are oval, have few eyes rather shallow. Smooth skin, white, slightly flushedwith pink. It is an extra fine quality cooking potato; makes good sized yields and is a favorite in this section and many others, especially where planted on light and loamy soil. Pk., **40c**; bu., **$1.10**; 10 pk. sack about **$2.50.**

EARLY ROSE—An old favorite sort which has long been popular for family use and still planted in many sections as the main variety for early crop. Tubers are oblong, light pink at the bud end but mostly white. It is of finest quality, cooks very mealy and one of the best for family use. Pk., **35c**; bu., **$1.00**; 10 pk. sack about **$2.25.**

EARLY SIX WEEKS—A popular sort for home gardens, producing very early crop. Has smooth skin slightly flushed, shallow eyes. Potatoes are oblong, cook mealy and white. Pk., **35c**; bu., **$1.10**; 10 pk. sack, about **$2.50.**

BLISS' TRIUMPH—An extremely early sort which is largely planted by truckers and market gardeners for shipping. It succeeds best on light or loamy soil. Potatoes are round, have few eyes rather shallow, pink skin but is only fair quality. Vines somewhat slender, yield moderate. Pk., **35c**; bu., **$1.10**; 10 pk. sack about **$2.50.**

BEAUTY OF HEBRON—Similar in appearance and growth to Early Rose from which it was a sport. It is not quite so pink at the bud end. Skin white, flushed with rose, cooks very mealy; excellent flavor and popular for home use and some markets. Pk., **35c**; bu., **$1.00**; 10 pk. sack about **$2.25.**

IRISH COBBLER—This has become an exceedingly popular and profitable variety for growing for market. Tubers are oval with smooth white skin, have few eyes rather deep. Grows to large size and produces enormous yields. Vines are thrifty and a reliable heavy yield can nearly always be expected. An excellent sort for market purposes and produces good crops both early and late. Pk., **35c**; bu., **$1.00**; 10 pk. sack about **$2.25.**

IRISH COBBLER POTATOES

CARMAN No. 3—One of the most desirable of all potatoes for second early or late crop, producing enormous yields of extra fine quality potatoes. It is round, slightly flattened, pure white; has beautiful smooth skin, shallow eyes and is a fine table variety as well as extra fine keeping sort. Vines are vigorous and productive. We heartily recommend this to all growers for market or for family use as second early or late sort. Pk., **35c**; bu., **$1.00**; 10 pk. sacks about **$2.25.**

BURBANK—An old favorite sort producing oblong potatoes of good size which are very fine quality. It is largely grown for market and a favorite for home use. Pk., **35c**; bu., **$1.00**; 10 pk. sacks about **$2.25.**

SWEET POTATOES.

We carry in stock the best sort of seed grown by reliable planters. Varieties, **Yellow** and **Red Jersey, Red Bermuda** and **Southern Queen.** Prices variable. Write for quotations. Cannot be shipped until about April 1st.

EARLY WHITE TIP SCARLET

RADISH.

FINEST FRENCH STOCKS.

One ounce sows 100 ft. of drill. If broadcasted requires 10 to 12 lbs. per acre. For forcing in frames sow in January or February. Out of doors, sow from March to June for early and summer crop. For late, sow from July to September. Early sorts mature and are ready for the table in 21 to 30 days from sowing.

CULTURE—Quick growth is essential for tender, crisp radishes. Hence, rich soil and plenty of moisture are essential. They can be sown at intervals of ten days to two weeks for early use or grown as a catch crop between rows of beets, lettuce, onions, etc. When forced they require plenty of ventilation and moisture.

ROUND VARIETIES.

290 **EARLY WHITE TIPPED SCARLET**—One of the handsomest of the turnip varieties and a general favorite in nearly all large markets. It is excellent as a forcing sort or for earliest planting outdoors. Roots nearly round, slightly flattened on under side. Color very deep scarlet with distinct white tip. Flesh white of best quality. We strongly advise more extensive planting of this sort in this locality. Pkt., **5c;** oz., **10c;** ¼ lb., **20c;** lb., **60c.**

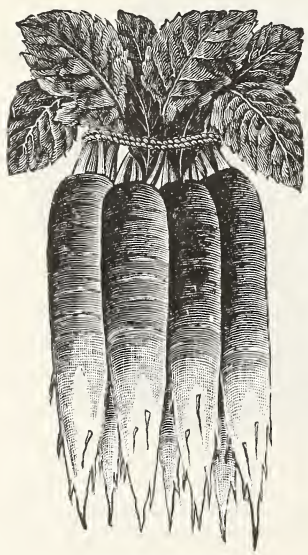
291 **EARLY SCARLET TURNIP**—A well known sort producing round or oval roots of bright scarlet color. Flesh white, crisp and tender. Tops medium quick growth and desirable for early planting either outdoor or for forcing. Pkt., **5c;** oz., **10c;** ¼ lb., **20c;** lb., **50c.**

292 **EXTRA EARLY SCARLET GLOBE**—One of the very best and most showy radishes for earliest forcing or growing outside. Roots are slightly olive shape, rich bright scarlet color; flesh white and tender. It is fit to pull very early and is especially desirable for market gardeners on account of its showy qualities. Pkt., **5c;** oz., **10c;** ¼ lb., **20c;** lb., **60c.**

293 **NON PLUS ULTRA**—A fine, extra early forcing radish. Roots are small, nearly round, scarlet, tops very small. Flesh white, crisp and tender. One of the handsomest of the forcing sorts. Pkt., **5c;** oz., **10c;** ¼ lb., **20c;** lb., **60c.**

294 **FRENCH BREAKFAST**—A small olive-shaped variety about 1½ inches long, which is very quick growing. Color beautiful deep scarlet shading to white at the tip. Top small. Quick maturing and splendid for very earliest crop. Pkt., **5c;** oz., **10c;** ¼ lb., **20c;** lb., **60c.**

EARLY SCARLET TURNIP



CHARTIER RADISH

295 **EARLY WHITE TURNIP**—Similar to Early Scarlet Turnip but little more flattened and slightly earlier maturing. It has very small tops, is of quick growth, suitable for forcing or early planting. Color clear white; flesh crisp and tender. Pkt., **5c;** oz., **10c;** ¼ lb., **20c;** lb., **50c.**

296 **GOLDEN GLOBE**—A splendid sort for second early crop as it does not get pithy easily and produces tender, crisp roots. Skin golden yellow, flesh white. Roots uniformly globe shaped, 2 inches long and 2¼ inches in diameter when mature. Pkt., **5c;** oz., **10c;** ¼ lb., **20c;** lb., **50c.**

297 **WHITE STUTTGART**—A splendid summer sort, producing large roots often 4 inches in diameter, top shaped. Skin is white, flesh white and crisp and does not become pithy until very late. Valuable for both early summer and fall crops. Pkt., **5c;** oz., **10c;** ¼ lb., **20c;** lb., **60c.**

LONG VARIETIES.

297 **CINCINNATI MARKET**—A popular sort in this section which has long been a favorite with market gardeners as it commands ready sale and good prices on this and nearby markets. It is a brilliant crimson color with white slightly tinged flesh, exceedingly sweet and tender. Grows 6 to 7 inches in length, straight and smooth and does not become hollow and pithy until very old. A remarkably fine sort for either market or home use. Pkt., **5c;** oz., **10c;** ¼ lb., **20c;** lb., **60c.**

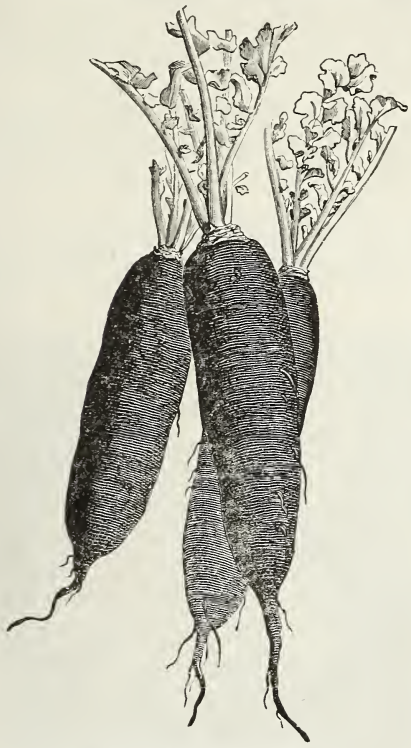
298 **LONG SCARLET SHORT TOP**—An old standard sort which is excellent either for home gardens or market. Tops short and small. Roots smooth, tender, uniform in shape; an attractive bright red color. Pkt., **5c;** oz., **10c;** ¼ lb., **20c;** lb., **50c.**

299 **CHARTIER (Scarlet)**—One of the best long Scarlets for second early summer or fall uses. Roots when fully grown, average 7 to 8 inches long and 1½ to 2 inches thick but even when only ½ inch thick are in good condition for table. It remains longer without getting pithy than any of the summer sorts. Color bright crimson shading to white at the tip. Pkt., **5c;** oz., **10c;** ¼ lb., **20c;** lb., **60c.**

RADISH—LONG VARIETIES—CONT'D.

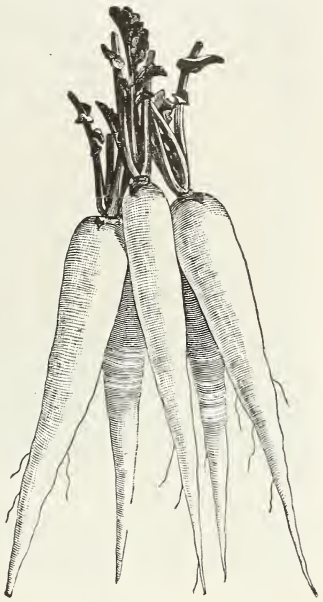
300 **LONG WHITE ICICLE**—The earliest of the long white varieties which is popular for forcing and earliest outdoor or early summer crop. It is productive and of excellent quality, crisp and tender. Roots are usually 5 to 6 inches long and about ½ inch in diameter with small tops. Pkt., **5c**; oz., **10c**; ¼ lb., **20c**; lb., **60c.**

301 **LONG WHITE NAPLES (or Lady Finger)**—An early, moderately productive, long white radish which is excellent for second early crop. Roots are pure white, slender and smooth, average 6 to 7 inches in length and ¾ inch in diameter at the thickest part. Flesh crisp and tender; tops medium size. Pkt., **5c**; oz., **10c**; ¼ lb., **20c**; lb., **50c.**



BLACK SPANISH RADISH.

302 **WHITE STRASBURG**—One of the most popular and desirable of all long white radishes for second early or summer crop. Even when comparatively small it is fine quality and remains crisp and tender much longer than other early varieties. Roots when full grown are 1½ to 3 inches and 5 to 6 inches long, tapering. Tops medium; roots smooth, crystal white color, handsome, showy, crisp and tender and especially desirable for market or family use. Pkt., **5c**; oz., **10c**; ¼ lb., **20c**; lb., **50c.**



WHITE ICICLE RADISH.

303 **LONG WHITE VIENNA**—An excellent second early variety producing roots 6 to 7 inches long, moderately thick, crisp and tender. Matures a little later than Cincinnati market. Pkt., **5c**; oz., **10c**; ¼ lb., **20c**; lb., **50c.**

FALL RADISHES.

304 **LONG BLACK SPANISH**—A favorite late sort producing long, thick, almost black, roots, with white flesh of fine texture. Decidedly pungent but well flavored. Roots are usually 7 to 9 inches long, 2 to 3 inches in diameter and it is one of the best of the long sorts and especially adapted for winter use. Pkt., **5c**; oz., **10c**; ¼ lb., **20c**; lb., **60c.**

305 **ROUND BLACK SPANISH**—Roots top shaped, 3 to 4 inches in diameter; skin black, flesh white; excellent quality. Similar in characteristics and quality to the long sort but better suited for shallow or heavy soils on account of its shape. Pkt., **5c**; oz., **10c**; ¼ lb., **20c**; lb., **60c.**

306 **SCARLET CHINA WINTER (Rose China)**—A popular sort producing cylindrical roots, stub-rooted, blunt, at both ends. Is bright, deep, rose color shading to white. Skin smooth, flesh white, crisp, tender and pungent. Roots usually 4 to 5 inches long, 1½ to 2 inches in diameter. A splendid sort for fall and winter. Pkt., **5c**; oz., **10c**; ¼ lb., **20c**; lb., **50c.**

307 **LONG WHITE SPANISH**—Similar in general characteristics to Long Black Spanish except that the skin is pure white. Pkt., **5c**; oz., **10c**; ¼ lb., **20c**; lb., **60c.**

SAND ISLAND SALSIFY.

RHUBARB.

This is ready to use very early in the spring and has fine medicinal qualities in addition to being delicious for making pies or as stewed rhubarb.

CULTURE—Strong roots planted in the fall can be used in limited way the following spring. If planted in the spring had better remain one year to establish growth. Seed sown early in spring in drills 15 inches apart will produce fair roots by next season. A rich, moist soil is desirable. When a few inches high, thin out or transplant 12 inches apart. The following fall transplant to deep soil, manured well, 3 by 4 ft. and protect with litter or leaves. Never allow Rhubarb to go to seed as it weakens the plant.

One ounce sows about 75 ft.; 6 lbs. to one acre. About 12 roots are sufficient for an ordinary garden. Plant roots in March, April or November. Sow seed in April.

310 **LINNAEUS**—A favorite sort. Roots, however, will not come true from seed. Pkt., **5c**; oz., **15c**; ¼ lb., **40c**; lb., **$1.25.**

RHUBARB ROOTS—**10c** each; **75c** per dozen and **$4.50** per 100. If to be mailed, add **5c** each extra.

SALSIFY.

A desirable winter vegetable which should be more extensively used throughout the Central States. Roots are palatable and can be served boiled or as fritters.

CULTURE—Sow in April in rows 18 inches apart, thinning out to 4 to 6 inches. Cultivate deeply and often. It is hardy and will remain out all winter but if desired can be dug before winter and stored in earth or sand to keep it from wilting.

One ounce sows 100 ft.; 3 to 4 lbs. are required per acre.

311 **MAMMOTH SANDWICH ISLAND**—The best sort which is much larger and a great improvement over the old-fashioned long sort. Pkt., **5c**; oz., **10c**; ¼ lb., **35c**; lb., **$1.00.**

BLOOMSDALE SPINACH

SPINACH

Has long been one of the most popular of all greens for market gardeners and truck growers and in some sections is grown in enormous quantities. In this locality Spinach is sown broadcast in March or April for early crop and from July to September for fall and winter crop at the rate of about 20 to 25 lbs. per acre. It can also be sown in drills 12 to 15 inches apart and cultivated.

One ounce sows 100 ft. of drill. 15 to 20 lbs. per acre in drills. 20 to 25 lbs. per acre, broadcast. One-half pound is sufficient for a medium garden.

312 **BLOOMSDALE SAVOY (or Norfolk)**—A very early sort especially desirable for fall use. Plant is upright, having glossy, thick, crimpled, green leaves, pointed. A favorite sort for market gardeners and truckers. Oz., **5c;** ¼ lb., **10c;** lb., **20c;** 10 lbs. and over, **15c** per lb.

313 **ROUND THICK LEAF**—One of the best sorts for spring sowing as it is somewhat slower to go to seed than Bloomsdale. Plant upright, vigorous; leaves large, thick, fresh bright green color. Oz., **5c;** ¼ lb., **10c;** lb., **20c;** 10 lbs. and over, **15c** per lb.

314 **NEW ZEALAND**—An especially desirable sort for summer use as it thrives during hot weather in any soil, rich or poor. It has tender shoots of good quality which may be cut throughout the summer. Plant becomes very large and spreading, leaves small, broad and pointed. Plant 3 or 4 seed in hills 2 ft. apart each way. Germination will be hastened by soaking in warm water 24 hours before planting. Pkt., **5c;** oz., **10c;** ¼ lb., **20c;** lb., **60c.**

SQUASH.

Called Cymling in the South.

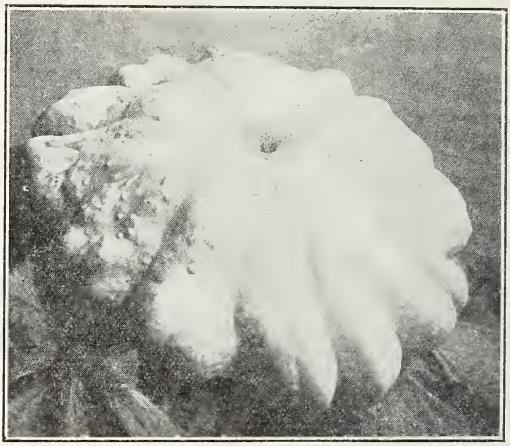
Summer squash requires one ounce to 30 hills. Winter varieties one ounce to 15 hills and 3 to 4 lbs. per acre.

CULTURE—Plant when the weather has become settled and the ground fairly warm. Bush varieties are planted 3 x 4 ft.; running varieties 6 x 8 ft.; about 4 to 6 seeds per hill and thin out later leaving the strongest plants about 3 to the hill. Hills similar to those made for Cucumbers with well rotted manure or fertilizer are best. Winter varieties may be stored in a moderately warm dry place of even temperature.

INSECT PESTS—For the Striped Beetle, see under Cantaloups. For the Squash Bug, Tobacco Dust is sometimes a preventive but Kerosene Emulsion is the best remedy.

SUMMER VARIETIES.

316 **EARLY WHITE BUSH**—A well known early variety, largely planted in the South both for market and home use. Color is creamy white with comparatively smooth surface, somewhat flattened and scalloped. Vines are bush, vigorous and very productive. Known as Patty Pan or Cymling in the South. Pkt., **5c;** oz., **10c;** ¼ lb., **25c;** lb., **85c.**



EARLY BUSH SQUASH.

317 **GOLDEN SUMMER CROOK-NECK**—An old standard running sort having long fruit with uniformly crooked neck. Color is bright yellow; densely warted surface and very productive. Pkt., **5c;** oz., **10c;** ¼ lb., **25c;** lb., **75c.**

318 **FORDHOOK**—An excellent running sort for both summer and winter use. Vines are strong, vigorous growth and very productive. Fruits 8 to 10 inches in length, oblong, slightly ridged; smooth, yellowish skin. Flesh thick and light yellow in color. Pkt., **5c;** oz., **10c;** ¼ lb., **30c;** lb., **85c.**

HUBBARD SQUASH

WINTER VARIETIES.

319 **HUBBARD**—A well known winter squash largely grown throughout the country. Fruits are large, olive shape with dark green skin and very thick flesh. It is an excellent keeper and splendid quality. Vines are strong running growth. Pkt., **5c;** oz., **10c;** ¼ lb., **35c;** lb., **$1.00.**

320 **WARTED HUBBARD**—Similar in fruit and shape to Hubbard except that the surface is very much warted. It is very handsome in appearance and extra quality. Pkt., **5c;** oz., **10c;** ¼ lb., **35c;** lb., **$1.00.**

321 **BOSTON MARROW**—Vines strong, of running growth and very productive. Fruits large, orange skin, deep orange flesh, oval with hard shell; a superior winter sort. Pkt., **5c;** oz., **10c;** ¼ lb., **35c;** lb., **$1.00.**

322 **VEGETABLE MARROW**—A variety very much esteemed in England and many parts of the North. Vines are of bush habit, producing elongated fruit about 9 inches long of pale straw color changing to deeper shade. Flesh is white. Young and tender fruit when sliced and fried in oil makes a vegetable delicacy highly esteemed. Can be used as other squash; has an especially delicate flavor. Pkt., **5c;** oz., **10c;** ¼ lb., **25c;** lb., **75c.**

TOMATO.

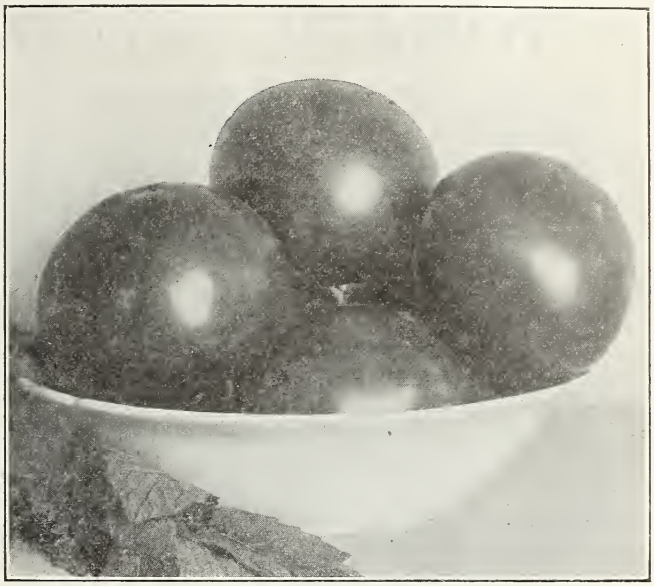
A popular crop in all home gardens and usually profitable for truckers, market gardeners and growers for canning factories.

CULTURE—For earliest crop sow in a hot bed or shallow boxes in February or March, transplanting when 2 or 3 inches high to small pots, trays or cold frames. When danger of frost is past, (usually in this climate the 1st to 10th of May), set in open ground 3 x 4 feet apart. Well rotted manure, Peruvian Guano or other good commercial fertilizer should be used in the hills at the rate of a dessert spoon-full per hill or about 200 lbs. per acre mixed with the soil. It is essential for producing good stocky growth that the soil be enriched in this manner as it will have a tendency to prevent blight and add vigor and fruitfulness to the vines. Tomatoes should be staked to keep the fruit from the ground and it will help also prevent blight, mildew and make them more prolific.

INSECTS AND BLIGHT—For the green worm which eats the foliage, use Hellebore, either dry or in solution, or Paris Green mixed with water at the rate of 1 lb. to 150 gallons and spray. For rot, blight and other diseases, spray the plants with Bordeaux Mixture in solution, commencing early.

Directions will be found under Insecticides.

One ounce produces about 2000 plants; 2 ounces produces enough plants to set one acre. For early crop sow in February; for late crop sow in open bed in April or May.



PURPLE KING TOMATO

EARLY VARIETIES.

330 **PURPLE KING**—One of the largest and best of the purplish pink varieties. Vines very vigorous and productive; fruits smooth, uniform in size nearly globe shaped. It is an extremely early sort and of excellent quality. We strongly recommend it for market gardens and it will prove one of the best sorts for home gardens for early use. It is especially valuable for shipping. Purple King will become popular wherever grown. It is a very large, early sort and its freedom from cracking and tendency from blight are strong points in its favor. Pkt., **5c;** ½ oz., **20c;** oz., **35c;** ¼ lb., **$1.00;** lb., **$3.50.**

331 **SPARK'S EARLIANA**—A deep scarlet, very early variety which is largely planted by truckers and market gardeners. Fruit is borne in clusters, is medium to large, nearly round, and exceptionally smooth for so early a variety. On account of its extreme earliness and the fact that the crop ripens uniformly and very early it is one of the most valuable of the first of the early sorts. Pkt., **5c;** oz., **25c;** ¼ lb., **75c;** lb., **$2.50.**

332 **JUNE PINK**—An extra early purplish-pink sort similar to Earliana except in color. It is a valuable variety for market gardeners and truckers, especially on markets where purplish sorts find ready sale. Pkt., **5c;** oz., **25c;** ¼ lb., **75c;** lb., **$2.50.**

333 **CHALK'S EARLY JEWEL**—A particularly desirable sort with purplish scarlet fruit, nearly round, smooth, of large size and a most excellent quality. Fruit ripens early and not inclined to crack, is early and pickings are extended over a long season. One of the best of the early sorts and unsurpassed for home gardens. Pkt., **5c;** oz., **25c;** ¼ lb., **75c;** lb., **$2.50.**

334 **DWARF CHAMPION**—An early variety which is very dwarf growing. The vines are so stiff that they are generally self-supporting. Fruits medium size, purplish red and borne moderately early. On account of its strong, upright growth, it is sometimes sold as Tree Tomato and is desirable on extremely rich soil and where tall varieties have a tendency to make too much vine. Pkt., **5c;** oz., **20c;** ¼ lb., **60c;** lb., **$2.00.**

335 **ACME**—A well known sort of the older type which produces extra early fruit of purplish pink color, good size. It has long been a favorite with market gardeners and truckers. Pkt., **5c;** oz., **15c;** ¼ lb., **40c;** lb., **$1.50.**

MAIN CROP SORTS.

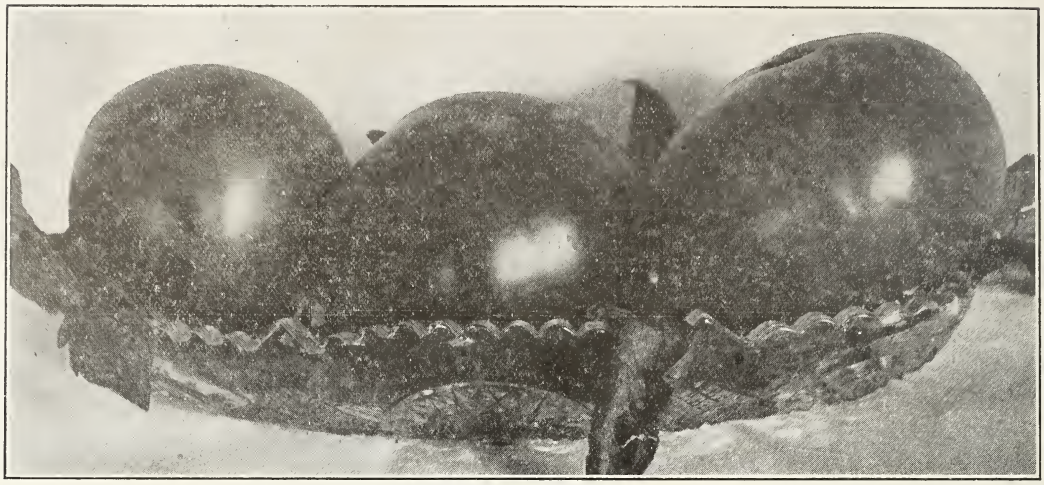
336 **BEAUTY**—One of the most satisfactory and popular sorts. Fruits are purplish pink, ripen evenly, are uniform in size, very solid and finest quality. They are exceptionally smooth and do not crack readily. Vines large, vigorous and very productive, ripening fruits about mid-season. Pkt., **5c;** oz., **20c;** ¼ lb., **50c;** lb., **$1.75.**

337 **BUCKEYE STATE**—A variety about 1¼ times are large as Beauty. It is purplish pink, solid, ripens evenly, fairly productive and on account of its large size and general reliablity it is a favorite sort with market gardeners. Fruits are usually borne in clusters of 4 to 8 and ripen later than Beauty. Pkt., **5c;** oz., **20c;** ¼ lb., **65c;** lb., **$2.25.**

338 **STONE**—One of the very best Tomatoes producing large, very smooth, solid fruit slightly flattened, deep red color. It is very popular with all markets growers and especially desired by canners. Ripens mid-season. On account of its large yields and general uniformity in production we strongly recommend it for both market gardens and home uses. Pkt., **5c;** oz., **15c;** ¼ lb., **50c;** lb., **$1.50.**

BEAUTY TOMATO

TOMATO—MAIN CROP SORTS—CONT'D.



PONDEROSA TOMATO

340 **PONDEROSA**—One of the largest and finest varieties for home use. It is purplish pink in color. Vines vigorous, tall, fairly productive. Fruits are very solid and have exceptionally few seeds. It is fairly smooth for so large a variety and sometimes attain such a size that one slice will cover a dinner plate. Very free from acid, has few seeds, is of delicious flavor and most excellent for slicing; ripens about mid-season. On account of its thick meaty flesh and fine flavor it is most desirable for home use, and the large showy handsome fruits are popular sellers for fancy fruit stands. Pkt., **5c**; oz., **30c**; ¼ lb., **$1.00**; lb., **$3.50.**

339 **TRUCKER'S FAVORITE**—A large, deep purple variety, producing uniform size fruit. It is somewhat deeper color than Beauty; fruit being more globe shaped, largely used for main crop, producing fine yields of large, smooth, solid fruits which command best prices—hence very popular with truckers and market gardeners. Pkt., **5c**; oz., **20c**; ¼ lb., **60c**; lb., **$2.00.**

342 **DWARF STONE**—Similar to Stone, being bright red, very smooth, solid, fine quality. The plants, however, are very much more dwarf, growing more like Dwarf Champion—hence, require very little staking and can be grown closer together. Valuable for small gardens or market gardens where close planting is desirable. Pkt., **5c**; oz., **20c**; ¼ lb., **60c**; lb., **2.00.**

343 **LIVINGSTONE'S GLOBE**—A large, purplish pink, globe shaped sort. Fruits are very nearly round, fairly even in size, smooth and mature quite early. Vines are vigorous, productive and thrifty. It is popular and profitable for outside crop and a very superior sort for green house forcing. Many growers depend for their whole crop on this sort. Our stock of this is very select. Pkt., **5c**; oz., **25c**; ¼ lb., **75c**; lb., **$2.50.**

344 **CINCINNATI PURPLE**—A favorite sort in this locality and one of the very best for market or home use. It is very round, smooth, deep shaped, solid and of splendid flavor. Vines are vigorous and remarkably productive. Fruits of large size, very meaty; have small seed cells and of rich flavor. Pkt., **5c**; oz., **20c**; ¼ lb., **60c**; lb., **$2.00.**

345 **CORELESS**—A large, uniformly solid variety which is globe shape. Fruits are bright scarlet almost free from green core and with little or no depression at the stem end—hence, it is especially desirable for slicing, canning and shipping. Altogether one of the most desirable of main crop or late varieties. Vines being vigorous, not susceptible to blight and very productive. Pkt., **5c**; oz., **20c**; ¼ lb., **60c**; lb., **$2.00.**

346 **IMPROVED TROPHY**—An old and very popular sort for family gardens. It is very large, ripens moderately late, is a deep crimson scarlet color and excellent quality. Fruits solid, fairly smooth and fine for cooking, canning or slicing. Pkt., **5c**; oz., **15c**; ¼ lb., **50c**; lb., **$1.50.**

347 **GOLDEN QUEEN**—A large growing variety bearing abundantly. Fruits are golden yellow color, are smooth, well shaped and desirable for slicing as a contrast with red varieties on the table. Pkt., **5c**; oz., **20c**; ¼ lb., **60c**; lb., **$2.00.**

348 **YELLOW PEAR**—Fruits pear shaped about 2 inches long, rich clear yellow color, largely used for canning, tomato preserves and pickling. Pkt., **5c**; oz., **25c**; ¼ lb., **75c**; lb., **$2.50.**

349 **RED PEAR**—Fruit similar to Yellow Pear, excepting that they are deep purple red color. A splendid variety for preserves. Pkt., **5c**; oz., **25c**; ¼ lb., **75c**; lb., **$2.50.**

349A **YELLOW CHERRY**—Fruits ⅝ inch in diameter, perfectly round and smooth. A splendid sort for sweet or sour pickles and preserves. Pkt., **5c**; oz., **25c**; ¼ lb., **75c**; lb., **$2.50.**

TOMATO PLANTS supplied to nearby customers, varieties **"Beauty," "Ponderosa"** and other sorts, **25c** per dozen; **$1.50** per 100. Special prices in quantities.

TURNIP.

One of the easiest crops to grow and profitable for stock feeding and in most cases for markets.

They cost so little to grow, make splendid nutritious feed and should be much more generally used. A good yield from an acre of Turnips is from 600 to 1000 bushels.

CULTURE—For early use, sow in March or April either broadcast, or in drills, using preferably Milan or Purple Top Strap Leaf or Globe.

Ruta-Baga are sown in June or July, preferably in drills 2 feet apart thinning out to 6 inches.

Turnips for main crop are sown from July to September 15th, broadcast 1½ to 2 lbs. per acre.

Turnips for greens, can be sown as late as October 1st and require 3 to 4 lbs. per acre.

Ounces of all varieties excepting Milan, each 5c; ¼ lb., 15c; If to be sent by mail, add 5c per lb. postage.

EARLY RED OR PURPLE TOP TURNIP.

360 **EARLY PURPLE TOP MILAN**—Extra early variety which is very sweet and particularly valuable for sowing in early Spring. Roots are medium size, plants purple top flat. Best for private gardens and preferable to grow for early market crop. Pkt., **5c;** oz., **10c;** ½ lb., **20c;** lb., **60c.**

361 **EARLY RED or PURPLE TOP (Strap Leaf)**—A well known early sort which is largely used in all sections. Our stock is American grown and extra choice. Lb., **40c;** 5 lbs., and over **35c** per lb.

362 **IMPROVED PURPLE TOP GLOBE (Strap Leaf), called also RED TOP GLOBE**—A very superior strain, producing large smooth roots, which are sweet and tender. One of the best for early or main crop use. Choice American Stock. Lb., **40c;** 5 lbs., or over, **35c** per lb.

363 **EARLY WHITE FLAT DUTCH (Strap Leaf)**—Similar to Early Purple Top Flat, excepting that it is white all over. Quick grower, excellent quality and splendid for early crop. Lb., **40c;** 5 lbs. or over **35c** per lb.

364 **WHITE EGG**—An early, oval variety with smooth, clear white roots, medium size which grow half out of the ground, top small. flesh clear white, fine grained, sweet. Excellent either when young or fully matured. Lb., **40c;** 5 lbs. or over, **35c** per lb.

365 **LONG WHITE COW HORN**—These often grow 12 to 15 inches long and are very valuable crop for stock feed, flesh is white, well flavored and good for table use. Lb., **40c;** 5 lbs. or over, **35c** per lb.

366 **YELLOW ABERDEEN**—A globe shaped variety with purple top, flesh yellow, sweet, somewhat coarse grain, an excellent sort for stocks, producing large crop. Lb., **35c;** 5 lbs. or over, **30c;** per lb.

367 **YELLOW GLOBE or AMBER**—A globe shaped variety with orange yellow flesh and green top, valuable for stock feeding. Lb., **35c;** 5 lbs. or over **30c** per lb.

368 **SEVEN TOP**—Used entirely for greens and very popular in the Southern States. Lb., **35c;** 5 lbs. and over **30c** per lb.

369 **IMPROVED AMERICAN PURPLE TOP, RUTA-BAGA**—Our stock of this is superior stock and can be depended on by the most critical growers. Ruta-Baga besides being best food for stock, are the sweetest of all Turnips for table use. Lb., **40c;** 5 lbs. or over **35c;** per lb.

TOBACCO.

Saved from crown shoots only and grown for us by practical growers.

CULTURE—The seed is sown from February to April in open beds. Ground must be clean, very finely pulverized, raked fine and smooth. It is customary to burn over the top of the bed by piling brush or litter to destroy weed seeds and add fertility for the young plants. After sowing, beds are protected with thin cotton cloth similar to cheese cloth to protect them from tobacco flies. About June 1st it is set in rich or highly fertilized ground in rows 3½ x 3 ft. Cultivate often and destroy worms by applying Paris Green with a Leggett's Champion Paris Green Gun or Little Giant Duster.

One ounce sows 50 sq. yds., sufficient to set 2 or 3 acres. Peruvian Guano will give most excellent results on this crop and should be applied in hills two to three hundred pounds per acre.

350 **WHITE BURLEY**—A standard sort which is more largely grown in Blue Grass region of Kentucky, Ohio, Tennessee and Missouri than any other sort. It is a large growing sort having very broad leaves of finest quality and largely used for fine bright leaf, especially for cigarette tobacco, fine bright mixing tobacco and outside wrappers for plug. Commands highest prices on the market and where soil is suitable the most profitable of all sorts. Pkt., **10c;** oz., **30c;** ¼ lb., **$1.00;** lb., **$2.50.**

351 **STAND-UP BURLEY**—Has all the good qualities of White Burley but superior to that variety in many respects. The leaves instead of drooping have a more erect position on the plant, turning upward rather than down—hence, the name "Stand-up." It is fast becoming the most popular type of Burley and largely grown by planters in all Burley sections. Pkt., **10c;** oz., **40c;** ¼ lb., **$1.15;** lb., **$3.00.**

352 **CONNECTICUT SEED LEAF**—A popular sort with northern and eastern growers on account of its early maturity and extra fine quality. Plants are short and stocky, leaves moderately long of good width, and make excellent filler. Pkt., **10c;** oz., **25c;** ¼ lb., **65c;** lb., **$2.00.**

353 **HAVANA**—A fine strain of Americanized Havana used for cigars and adding flavor to smoking mixtures. Pkt., **10c;** oz., **40c;** ¼ lb., **$1.25;** lb., **$4.00.**

354 **ZIMMER'S SPANISH**—A very early sort of moderate growth, largely used for cigar filler. Very popular in northern sections and uniformly good yielding. Pkt., **10c;** oz., **25c;** ¼ lb., **65c;** lb., **$2.00.**

J. McC. CHOICE FLOWER SEEDS

With Cultural Instructions and Information.

DISCOUNT ON PACKETS.

For each 25c remitted, select 35c worth.
" " 50c " " 75c "
" " $1.00 " " $1.50 "

Prices on ounces and pounds are net; no discount.
All prices include postage except where noted.

Wonderful and satisfactory results can be obtained from growing flowers from seeds and as a rule there is comparatively little trouble. Some special varieties require particular treatment but most of them can be easily grown and while a few are to be grown in hot beds and transplanted, the majority can be sown in open border or in open beds where they are to bloom, afterwards thinning or transplanting to positions they are to occupy. It is essential that the ground be clean, fairly rich and some care taken to keep down weeds, especially when the young plants are first coming up. As a rule a commercial fertilizer, such as Peruvian Guano, will give better results on soil than stable manure because it eliminates weeds and affords all of the elements of plant food necessary to the proper development of flowers.

Flowers from seeds may be divided into three distinct classes:—**ANNUALS * BIENNIALS * PERENNIALS** and are abbreviated and described briefly as follows:

ANNUALS—Producing flowers and seeds the first season from sowing but last only one year as they die in the summer or fall. They sometimes come up year after year from self-sown seeds but as a rule this is not to be depended on. Among them are some of the most beautiful and showy flowers of our gardens and a selection of various sorts will give an uninterrupted succession of display from early summer until late fall.

ANNUALS are divided into three classes:

HARDY ANNUALS (H. A.) which are usually sown in open border the end of March or April, thinning out and transplanting as necessary.

HALF-HARDY ANNUALS (H. H. A.) are usually started in boxes, frames or hot beds and transplanted when the weather is warmer or if sown in open border, delay planting until the ground is fairly warm, say the middle of April to the 1st of May.

TENDER ANNUALS (T. A.) are still more susceptible to cold and bad weather and should have a little more careful treatment than the other two classes.

BIENNIALS—Biennials are plants which last two years, most of them sown early and bloom the first season and again the following season after which they usually die, but some biennials with close cutting are practically perennial. Among them are some of our best border plants which are useful both for the garden display as well as home adornment and wearing.

BIENNIALS are also of three classes:—**HARDY BIENNIALS** (H. B.); **HALF-HARDY BIENNIALS** (H. H. B.); and **TENDER BIENNIALS** (T. B.) The various classes require about the same treatment as for the same classes of Annuals.

PERENNIALS—These embrace a wonderful collection of showy and satisfactory plants. Many of them attain considerable height and are valuable as shrubbery for decoration but the majority are what are called **HERBACEOUS** Perennials in that they die down to the roots each year and spring up again the following season. In the present day of permanent homes, Perennials are among our most popular flowers as once planted they live for a long time and in laying out gardens and grounds a careful selection of perennials will add the greatest attractiveness and beauty. Perennials should be put in such portions of the garden that they will be permanent and not require removing. If planted in borders a grouping of sorts suitable to the shrubbery and according to height is to be desired. Perennials while usually not blooming until the second year if sown early will generally bloom the first year, especially so if started early in the house. Or seeds can be sown in August and September; thinning or transplanting as desired. They will then bloom the following year.

PERENNIALS may be divided in the same classes as the preceding, which are **HARDY PERENNIAL** (H. P.); **HALF-HARDY PERENNIAL** (H. H. P.); **TENDER PERENNIAL** (T. P.) and require practically the same treatment as the other two classes.

It is desirable in some cases to transplant Annuals, Biennials and Perennials to small pots before planting in the open ground.

SELECTION OF SORTS.

In planting mixed borders it is of course desirable to get plants of different heights in their proper position; hence, we have indicated throught the catalog as far as possible the approximate heights which the different plants attain. Then it is usually desirable to know at about what season the plants bloom and how long they continue so this is indicated by figures 1-2-3-. It is of course almost impossible considering various soils, climate, localities and seasons to state accurately the time of blooming as so much depends on the time sown, amount of sunshine and other contingencies, but where such information is stated in the catalog it can be depended on as being approximately right.

RULES FOR PLANTING.

Flower seeds are usually small; hence, should never be planted deep. A good general rule is to sow seed at a depth not over 3 or 4 times the diameter of the seed. In very small seed, covering should be very light but the ground should always be firmed down after the seed is sown. Do not attempt to work your garden or border when the ground is wet as it makes it very hard the whole season afterwards. Wait until the ground is in good condition and put in it as fine order as possible. Careful preparation before planting is of as much value as the entire cultivation afterwards. Flower seeds are preferably sown in small rows rather than broadcast and a most effective bed can be made by sowing in rows of different sorts according to heights (allowing sufficient space between rows). Start in the center with tall plants and gradually taper off to small border plants. If the bed is large a Planet Junior Seed Sower will be found excellent for sowing flower seeds but if sown in limited quantities this can be readily done by hand. Sowing in rows allows weeding to be done more easily without pulling up the young plants and if transplanting is to be done the plants can be more readily lifted.

GENERAL LIST OF
J. C. McC. Choice Flower Seeds

Abutilon (Chinese Bell Flower)—A class of shrubby tender perennials which is attractive and ornamental. The flowers are pendulous and bell shaped, 1 to 1½ inches in diamater with 5 petals and a single stamen stem in the center. It is of strong growth, easy cultivation, free flowering and the various colored blooms, extend from pure white through different shades of pink to scarlet and in shades of yellow. T. P. 2 to 3 feet high.

500 **Choice Mixed Colors,** pkt.....10c

501 **Achillea** (Ptarmica. "The Pearl")—A hardy perennial attaining height of about 2 ft. which bears an enormous amount of pure, double, white flowers in close heads. It is one of the best plants for cemetery uses and a most decided adjunct to gardens. If sown early and transplanted it will flower the first season or can be sown later in the open ground. Pkt...10c

Aconitum (Monk's Hood)—A hardy perennial producing long spikes of blue flowers somewhat resembling Delphinum or Perennial Larkspur. It is better suited to permanent borders and is well adapted to partial shaded or moist situations.

502 **Napellus, Blue**—Height 3 to 4 feet. Pkt.....10c

Ageratum (Devil's Paint Brush)—A beautiful hardy annual which bears in dense clusters attractive feathery flowers which are very useful for bouquets or decoration. It grows in bush form and is desirable for outdoor bedding and borders, bearing profusely and covered with blooms nearly all the summer. For earliest blooming can be started indoors or later sown outside.

503 **Mexicanum**—About 2 ft. high, hardy, bearing light blue flowers. Oz., **30c.** Pkt.....5c

504 **Imperial Dwarf White**—Height 10 inches. Oz., **40c;** Pkt.....5c

505 **Imperial Dwarf Blue**—Height 10 inches. Oz., **20c.** Pkt.....5c

Alyssum—A hardy annual, which is useful for borders, edgings or massing in small beds. It blooms very early and is almost covered with clusters of trusses of small white flowers which are sweet scented having a peculiar, delicate fragrance

506 **Sweet**—Height about 8 to 10 inches but spreading. Oz., **25c.** Pkt.....5c

507 **Tom Thumb**—A splendid sort for edges, borders, or rock work. Height about 6 inches. A compact mass of bloom 12 to 15 inches across. Oz., **40c.** Pkt.....5c

AQUILEGIA, KELWAY'S HYBRIDS.

ANTIRRHINUM

Amaranthus—A class of annuals which are desirable on account of their bright multi colored foliage. Some of them are valuable for cutting. Tall varieties afford brilliant contrasting colors and as the leaves and stems are usually of different shades, red and green, are unique in many respects.

508 **Tricolor (Joseph's Coat)**—Leaves red, yellow and green especially brilliant if grown in rather poor soil. Height 3 ft. Oz., **25c.** Pkt.....5c

509 **Caudatus (Love Lies Bleeding)**—Long, drooping sprays of brilliant scarlet flowers. Height about 2 ft. Oz., **20c.** Pkt.....5c

ANTIRRHINUM (Snapdragon)

Well known, showy border and bedding plants of long blooming season. The spikes have curious shaped tubular flowers with spreading lobes and finely marked throats. They are fragrant, brilliant colors and most desirable for cutting in addition to being one of the most ornamental bloomers for garden uses grown from seed. Succeed in any good garden soil, growing 1½ to 2 ft. high, if sown early and transplanted will bloom the first season. H. P. 2-3.

GIANT FLOWERED VARIETIES—(Grandiflora)

Bearing large spikes of enormous flowers in many brilliant colors. Our strain is extra choice.

510 **Queen Victoria**—Very handsome, fine white, excellent for cutting. Pkt.....10c

511 **Delilah**—Enormous flowers, carmine with white throats. Pkt.....10c

512 **Blood Red**—Large, brilliant crimson spikes. Pkt.....10c

513 **Brilliant Rose**—Pkt.....10c

514 **Giant Yellow**—Pkt.....10c

515 **GRANDIFLORA MIXED**—A select strain of this beautiful flower which comprises the best sorts in many and gorgeous colors. Oz., **40c.** Pkt.....5c

DWARF SORTS.

516 **Queen of the North**—A pure white sort, blooms profusely and growing about 12 inches high. Oz., **50c.** Pkt.....10c

517 **DWARF MIXED (Picturatum)**—A superb strain of blotched, striped, semi-dwarf, growing about 15 inches high; many brilliant collors. Oz., **40c.** Pkt....5c

AQUILEGIA (Columbine.)

One of the most pleasing of hardy perennials which is very desirable, easily grown and excellent for borders. It is an old-fashioned perennial, forming large permanent clumps which bloom profusely early in the season and remain in bloom for a considerable period. Flowers are of peduliar shape, pendant, exquisite form, often with long spurs.

Seed is somewhat slow in germination. Can be sown in boxes early or in open border in March and should be transplanted to permanent beds at least one foot each way. If desired seed seed can be sown in the fall. H. P. Height 2 to 3 ft.

We offer Single Aquilegia only as do not consider double sorts desirable.

518 **KELWAY'S HYBRIDS**—The most beautiful collection of long spurred Aquilegia which have been wonderfully developed and comprise brilliant and showy flowers from purest white through yellows, pinks, blues, purples and other shades. ¼ oz., **50c.** Pkt.. 10c

519 **Single Mixed**—A good strain of ordinary Aquilegia comprising fairly good sorts of single varieties. Oz., **40c.** Pkt.....5c

ASTER.

One of the most satisfactory of all annuals and unsurpassed for bedding, cutting and decoration. It is not only desirable for home gardens but profitable for professional growers. Asters are in many and diversified sorts, comprising various sizes, colors and forms. They bloom usually in mid-summer at a time when good cutting flowers are scarce. Plants are of vigorous growth and hardy, sometimes standing slight frost without serious injury. We recommend that various sorts be sown for blooming at different seasons. They can be easily grown without the assistance of hot bed. For earliest blooming, seed should be started in boxes or hot beds or little later they can be sown in beds in the open and transplanted where they are to bloom. allowing from one to one and a half feet between plants. Peruvian Guano will give good results on Asters and should be mixed with the soil before the plants are set out. We do not recommend Asters to be planted in the same soil two seasons as sometimes they suffer from disease on this account.

Our strain comprises the best of classes and of most select stocks. We advise sowings of earliest as well as late sorts for a succession of bloom.

H. H. A. 2-3-.

INSECT REMEDIES—For the black bug which sometimes eats the flowers, spray with a solution of Hellebore in water, or Paris Green in water, at the rate of a heaping half teaspoonful to two gallons of water.

QUEEN OF THE MARKET.

A very desirable sort blooming extremely early and bearing profusely. It has a wide range of colors and is fine for cutting and extensively used under glass. Plants are 16 to 18 inches high, of compact, branching habit and bear 10 to 15 flowers which are somewhat flat in shape with straight petals.

520 **White**—Very early, double, fine form. Oz., **80c.** Pkt. **5c**

521 **Rose**—Oz., **80c.** Pkt. **5c**

522 **Light Blue**—Oz., **80c.** Pkt. **5c**

523 **Dark Blue**—Oz., **80c.** Pkt. **5c**

524 **MIXED COLORS**—Comprising all shades blended in splendid proportions. Oz., **60c.** Pkt. **5c**

SEMPLE'S BRANCHING.

A class of strong growing Asters usually coming into flower about the end of August. They produce on long stems exceptionally fine, large double blossoms which are full petaled. The plants are distinctly branching in habit, about 2 ft. high thrifty and free flowering.

525 **White**—A pure white, excellent for home or commercial uses. Oz., **$1.00.** Pkt. **10c**

526 **Lavender**—A delicate shade of bright lavender, very large flowers. Oz., **$1.00.** Pkt. **10c**

527 **Purple**—Very large, deep purplish blue, which is extremely rich and pleasing. Oz., **$1.00.** Pkt. **10c**

528 **Pink**—A beautiful light pink, slightly tinged. Oz., **$1.00.** Pkt. **10c**

529 **Crimson**—Bright deep crimson, tinged with carmine. Oz., **$1.00.** Pkt. **10c**

530 **MIXED**—A wonderfully fine strain embracing all varieties and shades in proper proportion. Oz., **75c.** Pkt. **5c**

VICTORIA.

An early flowering strain of very large flowered Asters which have long been in favor and are popular. Flowers are sometimes 3½ inches across over half of the center with broad thick petals which curve outward. They overlap so regularly so as to resemble a double Dahlia. Plants grow about 15 to 18 inches high and are bushy and prolific. This has long been a favorite with commercial growers and is a superior sort to use in home gardens. Our strain is finest imported stock and comprises brilliant colors, both separate and mixed.

531 **White**—Very handsome flowers, excellent for cutting. ¼ oz., **60c.** Pkt. **10c**

532 **Rose**—A delicate shade of light pink and very handsome. ¼ oz., **60c.** Pkt. **10c**

533 **Crimson**—A glowing brilliant crimson. ¼ oz., **60c.** Pkt. **10c**

534 **Light Blue**—Very large, bright light blue. ¼ oz., **60c.** Pkt. **10c**

535 **Dark Blue**—Purplish blue, very brilliant. ¼ oz., **60c.** Pkt. **10c**

536 **MIXED**—A wonderful mixture comprising all shades including those listed above and many others. ¼ oz., **50c.** Pkt. **10c**

HOHENZOLLERN.

A giant flowered Aster growing 18 inches to 2 ft. high and bearing enormous double flowers with broad petals outcurved. Fine exhibition sorts. This is finer than the Giant Comet or Ostrich Feather being larger, petals much longer and more curled and twisted. It blooms early and extends over a considerable period.

537 **White**—Enormous, double white flowers with broad twisted petals. ¼ oz., **50c.** Pkt. **10c**

538 **Rose**—Brilliant, lively pink. ¼ oz., **50c.** Pkt. **10c**

539 **Light Blue**—Handsome flowers. ¼ oz., **50c.** Pkt. **10c**

540 **MIXED**—Comprises all shades. Fine stock. ¼ oz., **40c.** Pkt. **10c**

VICTORIA ASTERS.

CREGO.

Another of the largest and most beautiful Asters having double flowers which have long, twisted petals. Plant is branching, very vigorous. Flowers are borne on long strong stems. It blooms in mid-season and is highly commended among commercial growers.

541 **White**—Glistening pure white of enormous size. Petals grow so thickly, showing nothing of the center. One of the best for cutting. ¼ oz., **50c.** Pkt. **10c**

542 **Giant Pink**—A beautiful soft pink of large size. Petals curled and twisted. ¼ oz., **50c.** Pkt. **10c**

543 **MIXED**—Pkt. **10c**

QUILLED GERMAN OR CHINA ASTERS.

A mixture of fair strains which will give good satisfaction for general purposes.

544 **Finest Mixed Colors**—Oz., **50c.** Pkt. **5c**

Arctotis Grandis—African Daisy.

A showy handsome annual, growing about 2 feet high. Flowers are pure white on the upper surface and the reverse of the petal pale lilac blue. It is easily grown from seed. Sow in hot bed or open ground. Commences to bloom early and will continue until frost. Very desirable for cut flowers and the undeveloped buds will come out nicely if placed in a sunny window.

545 Pkt. **10c**

Asparagus.

Highly prized for very finely cut foliage which is used in decoration and in making of bouquets and designs. Valuable for conservatories and sometimes used in hanging baskets, being ornamental and trailing. Seed should be soaked in warm water before planting and when plants are large enough to handle, transplant to where they are to grow.

546 **SPRENGERI**—Sprays 3 to 4 ft. long, light green. Pkt. **5c**

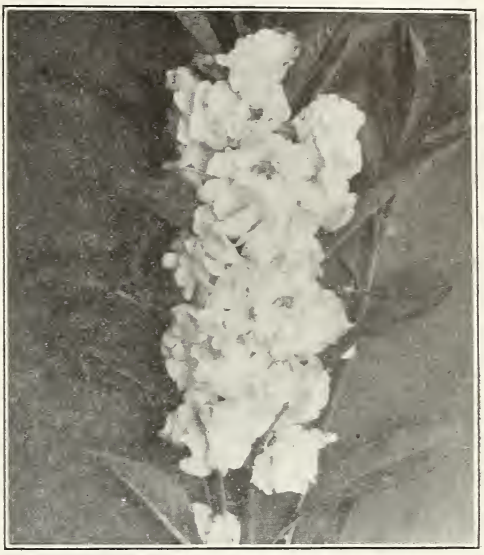
547 **Plumosis**—Very finely cut, feathery foliage; highly prized and ornamental; light green. Pkt. **10c**

BALSAM (Touch-Me-Not or Lady's Slipper)

An old fashioned flower which is generally popular in all gardens. It bears flowers of various shades, white, pink, red, yellow, purple, etc., some of which are beautifully striped and spotted. It is a tender annual which can be sown in open border; blooms early, or sown in house and transplanted if desired. Grows about 1½ to 2 ft. high, makes erect bushy plants and rich soil is required in producing the finest blooms.

548 **DOUBLE MIXED**—Oz., 50c; Pkt.....5c

549 **DOUBLE CAMELLIA FLOWERED WHITE**—Splendid for florists or boquets. Very double. Oz., **$1.00**; Pkt.....10c



BALSAM, CAMELLIA FLOWERED WHITE

Begonia, Vernon.

A tender Annual, producing large masses of bright, rich, red flowers, which are set off by abundant glossy green leaves, broadly margined with bronze or purple. The plant is very effective whether in bloom or not. It is hardy, very free flowering and excellent for pot culture or bedding out in partially shady locations. Suitable also for window boxes.

The seed is extremely small, hence should be sown very shallow and kept moist with mulch until germinate. Transplant as soon as large enough to handle to small pots.

550 Pkt.....10c

TUBEROUS ROOTED BEGONIAS. See under FLOWERING BULBS.

Bellis Perennis (English Daisy.)

A well known dwarf growing plant which bears massy and very double aster-like flowers. It is very useful for borders or growing for cut flowers. Plants are about 6 inches high and bear in greatest profusion. The seed is usually sown in August and as it is a half-hardy perennial, will with a little protection stand the winter. It can also be sown in the spring.

551 **DOUBLE MIXED**—Large, double flowers, various shades of pink, red, white and other colors. Pkt.....10c

552 **GIANT DOUBLE WHITE**—Splendid for bouquets, designs, etc. Pkt.....10c

Browallia. A free blooming plant producing masses of bright blue flowers which continue in bloom during the summer and autumn. Grows about 6 to 8 inches high. H. H. A. 553 **MIXED**—Various shades of blue. Pkt.....5c

CALENDULA (Pot Marigold.)

A hardy annual, which will grow and succeed in almost any garden. It produces a brilliant effect in beds and borders, being extremely free blooming and commencing early and continuing in greatest profusion until frost.

554 **METEOR**—Large, beautiful, imbricated, very large, double flowers. Petals light yellow, delicately edged with orange. Desirable for beds, borders and back-ground. Height, 2 ft. Oz., **20c**; Pkt....5c

555 **PRINCE OF ORANGE**—A very distinct variety, has large, double, golden yellow flowers. Petals shaded, dark orange. Produces in great abundance. Grows about one foot high. Valuable for borders and edgings. Oz., **25c**; Pkt.....5c

COREOPSIS LANCEOLATA GRANDIFLORA

CALLIOPSIS OR COREOPSIS.

Annual Sorts.

One of the best annuals for beds or borders, producing attractive and graceful flowers on long stems which are most effective and artistic for decoration. They commence blooming early and continue in profusion until early fall. Seeds are usually sown outdoors where they are to bloom but they can be sown inside and transplanted if desired.

556 **GOLDEN RAY**—Bright, golden yellow flowers with dark centers. Oz., **25c**; Pkt.....5c

557 **TINCTORIA**—Brilliantly colored flowers with large dark centers. Outer petals vary from clear yellow to brown, the dark colors predominating. Height 2 to 3 ft. Oz., **25c.** Pkt.....5c

MIXED—A splendid mixture comprising many varieties and a great range of colors. Oz., **25c**; Pkt.....5c

Perennial.

558 **LANCEOLATA GRANDIFLORA**—A hardy perennial blooming the first year from seed and producing on very long stems a constant succession of rich, bright yellow flowers, 2 to 3 inches across. Highly desirable and ornamental for borders or beds and exceedingly valuable for cutting and decorating purposes. Can also be sown in the fall outdoors. Oz., **50c.** Pkt.....5c

CANNA.

A well known ornamental plant of semi-tropical appearance which is largely planted in beds in groups and masses and as a background for other plants. It is usually grown from roots but good results can be obtained from seed if properly treated. As the seeds are very hard it is better to cut a small notch in them and soak in warm water for 24 hours before planting. It should be started in boxes or under galss and transplanted to open ground after the weather has become warm.

561 **CROSY'S HYBRIDS**—Saved from a brilliant collection of best blooming sorts and comprising many varieties and shades of colors. Oz., **25c.** Pkt.....5c

CANNA ROOTS. See SUMMER FLOWERING BULBS.

CANTERBURY BELLS (Campanula).

A hardy, herbaceous biennial, of branching growth which blooms profusely. It is excellent for beds and backgrounds, producing long racemes or bell or saucer shaped flowers of rich colors which are very effective and valuable for cutting.

Seed can be started early indoors, or sown in the fall. Height 2 to 4 ft.

562 **CALYCANTHEMA (Cup and Saucer)**—Large single flowers; white, lilac, rose and purple. One of the best sorts. Pkt.....10c

563 **SINGLE MIXED**—Comprises all shades, white, lilac, blue, violet, rose, etc. Oz., **25c**; Pkt.....5c

CANDYTUFT.

Hardy Annuals growing 12 to 15 inches high, of branching habit and producing in profusion large clusters of flowers which are splendid for cutting. They are excellent for borders or to plant in masses; also can be used for rockeries.

559 **EMPRESS**—Extra large, white trusses, produced in great profusion; fine for cutting. Oz., **40c.** Pkt...**5c**

560 **FINEST MIXED**—Comprising all colors and shades. Oz., **20c.** Pkt.....**5c**

CARNATIONS.

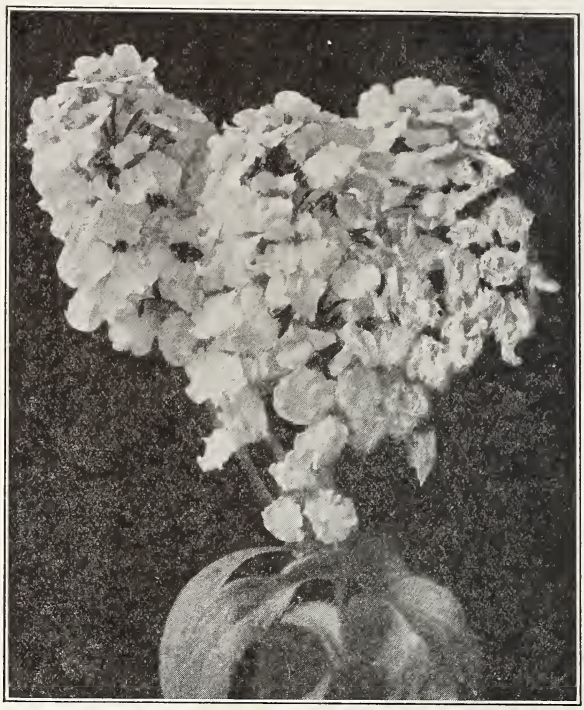
Well known border plants which are very popular in all gardens. Some varieties are best adapted for pot culture and greenhouses. Plants are branching but compact and erect. Produce very double, semi-circular blooms, with thick necks on slender stems and usually clove scented. The seeds we offer make flowers valuable for cutting, and are useful as border plants.

564 **MARGUERITE**—A very early blooming sort which sometimes blooms in four months from sowing. Flowers are large, double, deeply fringed, very fragrant. Plants semi-dwarf, good for bedding and desirable for cutting. Finest mixed colors. Oz., **$1.00.** Pkt.....**5c**

565 **FINE DOUBLE MIXED**—Good double sorts comprising many shades and highly recommended for outdoor culture. ⅛ oz., **50c.** Pkt.....**10c**

CELOSIA OR COXCOMB—An extremely ornamental summer bedding plant, bearing large comb-like purplish red heads. Seed can be started in boxes and transplanted or sown later in open ground.

566 **GLASGOW PRIZE**—Dwarf growing and bearing immense deep purplish red combs; foliage dark but not abundant. Pkt.....**10c**



EMPRESS CANDYTUFT

CENTAUREA CYANUS

CENTAUREA CYANUS.

(Called Corn Flower, Ragged Robin, Bachelor's Button, etc.)

Free flowering hardy annuals which are graceful and showy garden flowers. They are extremely popular both for borders and beds and general favorites for cutting. Flowers are borne on tall, slender or slightly branching plants with narrow leaves and comprise many bright colored single and double heads on long, graceful stems, some of which are quite fregrant.

567 **EMPEROR WILLIAM**—A beautiful sky blue sort which is exceedingly effective and attractive. Oz., **25c.** Pkt.....**5c**

568 **MARGUERITE**—Sweet scented, producing large white flowers on long stems; excellent forcutting. Height about 18 inches. Oz., **60c.** Pkt.....**5c**

569 **MIXED**—Comprising various shades, blue, purple, white, pink, etc. Oz., **20c;** Pkt.....**5c**

570 **CENTAUREA GYMNOCARPA (Dusty Miller)**—A silvery leaved sort with finely cut flowers, valuable for borders, beds, hanging baskets, vases and rockeries. It is of graceful and drooping habit growing 1½ to 2 ft. high. Oz., **60c.** Pkt.....**5c**

CINERARIA (Hybrida.)

Gorgeous and showy green house perennials, growing 1 to 2 ft. high, which bear immense heads of brilliant daisy-like flowers of many colors. The plants are in bush form, nearly as broad as high, have large velvety leaves which are shaded on the under side and the flowers are borne well above the foliage. They comprise many colors and are one of the most attractive pot plants. The seed should be started in the fall in shallow boxes, but it can be sown very early in the spring, transplanting to small pots when large enough to handle and afterwards shifted to larger pots.

577 **HYBRIDA GRANDIFLORA**—Choicest strain of large flowering Cineraria in splendid mixture. Pkt.....**25c**

COLEUS.

An ornamental tender perennial, with varied colored leaves, which is largely used for bedding and very attractive in vases. The leaves are in many shapes and shades of colors, green, yellow, orange, red and brown, most of them margined veined and striped and comprise a magnificent array of brilliancy. Height about 2 ft. but they can be trimmed back. Seed should be started early in the house and shifted as soon as large enough, transplanting into open ground when the weather has become settled and warm.

578 **FINEST MIXED COLORS**—Pkt.....**10c**

CHRYSANTHEMUM.

The annual Chrysanthemums bear little resemblance to the perennial or fall blooming varieties and have a beauty and attractiveness all their own. They are valuable border plants excellent for cutting and comprise many brilliant shades. Bloom very early and will become more bushy if pinched back in early growth. Seed may be sown in open ground or started earlier indoors. Height 1½ to 2 feet.

ANNUAL VARIETIES.

571 **EVENING STAR (Called Corn Marigold)**—Flowers of pure golden yellow sometimes three inches across and resembling in general appearance the Yellow Paris Daisy. Excellent for cutting and salable both in spring and fall. Pkt.....**10c**

572 **ECLIPSE**—Pure golden yellow with broad purplish scarlet rings on petals, denter dark blue; very beautiful and striking. Oz., **40c;** Pkt.....**5c**

573 **MIXED**—A mixture of best annual sorts. Oz., **30c.** Pkt.....**5c**

COSMOS

COSMOS.

A hardy annual, which is one of the most beautiful and effective of autumn flowering plants and bears in greatest profusion large single flowers resembling single Dahlias having a single row of long petals around yellow centers. Colors vary from purest white through various shades of pink and crimson. Some of them attain large size, being 3½ to 4 inches in diameter. Plants grow 4 to 7 feet high, have finely cut foliage which is very ornamental and form excellent backgrounds in beds. Flowers are borne on long slender stems which wave in the wind and are excellent for cutting and decoration. It is a very easy plant to grow. Seed can be started early if desired and transplanted or sown in open border where they are to bloom, thinning to 6 or 8 inches apart.

GIANT FLOWERED COSMOS—These produce enormous sized flowers, rich and varied colors, and is one of the best strains for show Cosmos.

579 **Giant White**—Oz., 50c Pkt.....5c

580 **Giant Pink**—Oz., 50c. Pkt.....5c

581 **Giant Crimson**—Oz., 50c. Pkt.....5c

582 **Lady Lenox**—A beautiful shade of shell pink, early blooming and very large flowers. Oz., 50c. Pkt.....5c

583 **Giant Mixed**—Comprises all shades. Oz., 40c. Pkt.....5c

EARLY FLOWERED COSMOS—These attain a height of about 4 ft. and bloom very profusely. They are 4 to 6 weeks earlier than the Giant sorts or old fashioned varieties. Flowers are not so large but as they bloom earlier are particularly adapted for late sowing or in northern latitudes where the season is short.

584 **Early Flowered White**—Oz., 50c. Pkt.....5c

585 **Early Flowered Crimson**—Oz., 50c. Pkt.....5c

586 **Early Flowered Pink**—Oz., 50c. Pkt.....5c

587 **Early Flowered Mixed**—A choice mixture. Oz., 40c. Pkt.....5c

588 **MIXED COSMOS**—A good strain. Oz., 30c. Pkt.....5c

Cyclamen.

A tuberous rooted pot plant which produces large, peculiar crown shaped blooms on thick tubular stems. Plants are very ornamental with good sized, glossy, dark green leaves, which are usually mottled and shaded with silvery white. They are for green house or conservatory planting only and the seed has to be sown one year to raise bulbs for the next. Can be sown in the spring or fall in shallow boxes, transplanting when large enough to small pots which are afterwards shifted to about 5 inch pots. T. P. Height about 1 ft.

589 **Persicum Giganteum Mixed**—One of the finest strains of large flowered English Cyclamen which comprises the best shades and colors, varying through the various shades of white, pink, crimson, and dark red. Pkt....25c

Chrysanthemum.—(Cont'd.)

Perennial Varieties.

575 **PARIS DAISY or MARGUERITE (Frutescens Grandiflora)**—A beautiful perennial white variety having yellow eye which is excellent for cutting. Pkt.....10c

576 **JAPANESE HYBRIDS**—A selection of the well known Autumn blooming Chrysanthemum, which are hardy. Flowers moderate size and in various colors mixed. Pkt.....10c

Dahlia.

A popular autumn flowering plant which will bloom the first season from seed if started early. Dahlias are well known and hardly need description. They are very free flowering and bulbs can be lifted in the fall and saved through to the following spring if kept in a place where they will not freeze. Many sports and new varieties are obtained from seed and they can be sown early in the house or greenhouse and transplanted when large enough to pots and set in the open ground when the weather has become settled and warm. Tender herbaceous perennials, 3 to 4 ft high.

590 **Single Mixed**—An extra fine strain producing brilliant flowers running through a wide range of shades. Pkt...10c

591 **Finest Double Mixed**—Saved from choicest double flowers including shades of red, pink, maroon, yellow, white, etc. Pkt.....10c

(For DAHLIA ROOTS, see SUMMER FLOWERING BULBS.)

DAISY, ENGLISH—See Bellis Perennis.

" **ORANGE RIVER**—See Dimorphotheca.

" **PARIS**—See Chrysanthemum, Perennial Varieties.

" **SHASTA**—See Shasta Daisy.

" **AFRICAN**—See Arctotis.

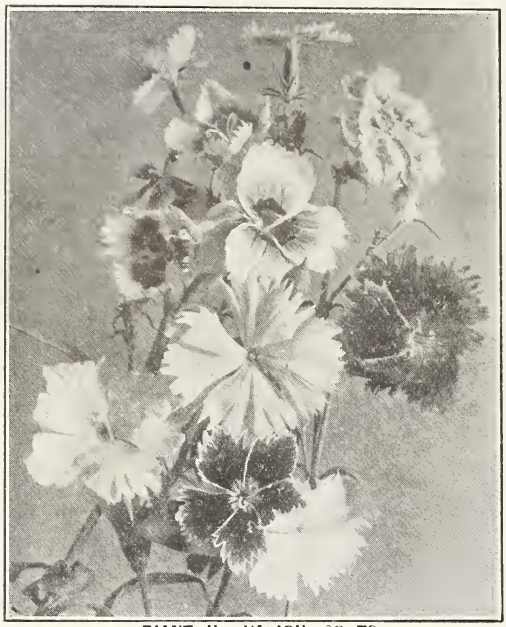
Delphinium (Perennial Larkspur.)

Very ornamental hardy perennials which are extremely attractive for borders or beds of shrubbery. It has long clustered spikes of beautiful irregular flowers often with long spurs and its beautiful shades of blue are very much admired. Our strain of Delphinium is particularly choice quality, comprising largest blooms and with the widest range of colors. We do not offer ordinary cheap strains at all. Seed can be sown early indoors and transplanted or in open border where they are to bloom, afterwards thinning to 1 to 1½ feet apart or seed can be sown in August and September where they are to bloom and thinned out the next spring. Height 3 to 5 ft.

592 **KELWAY'S NEW LARGE HYBRIDS**—The finest strain of Delphinium offered, producing very large flowers with long spurs and comprising a gorgeous array of colors and shades. Pkt....10c

(See also ANNUAL LARKSPUR)

DELPHINIUM KELWAY'S HYBRIDS



DIANTHUS—VARIOUS SORTS

DIMORPHOTHECA AURANTIACA

(African or Orange River Daisy).

A showy hardy annual bearing large bright orange yellow flowers, 2 to 2½ inches across. Plants grow 1 to 1½ ft. in height. Its daisy-like flowers are produced on long stems. They are of brilliant orange color with black center and surrounded by a dark colored disk. It is well adapted for summer flowering in beds or borders. Seed can be sown in open gorund in rows 1 to 1½ ft. apart, thinning out to 10 or 12 inches apart.

597 **Choice Mixed Hybrids**—Pkt.....10c

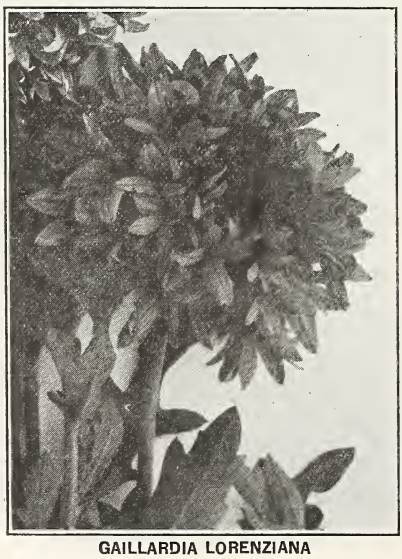
ESCHSCHOLTZIA (California Poppy).

Very attractive hardy annuals growing about 1 ft. high which bear large single flowers on fairly long stems which are excellent for cutting. They bloom over a long season and a bed in full flower is very gorgeous. Foliage is finely cut, has bluish tinge of bloom delicate and attractive. Flowers are more or less saucer shape, various shades of yellow orange and orange crimson. Seed is sown early out of doors where they are to bloom, either broadcast or in drills, thinning after plants are well started.

598 **Californica**—Deep yellow with orange center indigenous to California and is the State flower. Oz., **25c.** Pkt..5c
Golden West—A very large, bright yellow sort with deep orange at the base of petals. Oz., **30c.** Pkt.....5c

599 **Crimson Flowering**—Clear rosy crimson produced profusely. Very valuable addition to this class of plants. Oz., **40c.** Pkt.....5c

600 **Mixed**—An excellent mixture including yellows, creamy white, scarlet, orange and crimson shades. Oz., **25c.** Pkt.....5c



GAILLARDIA LORENZIANA

DIANTHUS—(Pinks.)

Many beautiful and profitable flowers are comprised under this heading, such as Carnations, Sweet William, etc., but the varieties we offer below are mostly hardy annuals. They are old-fashioned favorites, blooming profusely and suitable for bedding borders and cutting. Stems are of good length and strong; colors are brilliant and often sweet scented. The seed should be sown in open ground in the spring, after danger of frost, in the place where they are to bloom. They can be sown either broadcast or in rows. Plants usually grow about 1 ft. in height and bloom moderately early in the season.

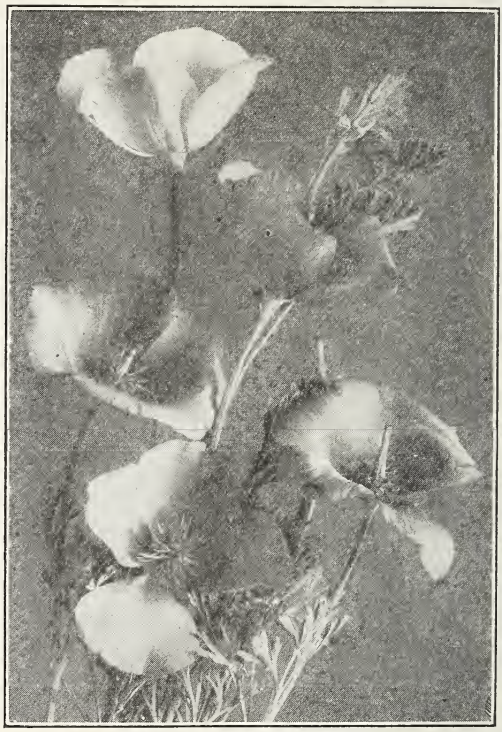
593 **CHINENSIS Fl. Pl. (Double China Pink)**—A mixture of double pinks comprising white to dark crimson shades and including purple and darker blotchings. They are unsurpassed in varieties and brilliant colorings. Oz., **30c.** Pkt.....5c

594 **HEDEWIGGI (Single Japan Pink)**—A splendid mixture of single flowers of brilliant shades, brilliantly marked. Plants dwarf and very free flowering. Oz., **40c.** Pkt.....5c

595 **HEDEWIGGI, Fl. Pl. (Double Japan Pink)**—Very double with deep fringed petals. Colors vary from white to rose, lilac, carmine, crimson, scarlet, purple, brown and almost black, spotted and striped. Oz., **40c.** Pkt.....5c

PERENNIAL.

596 **Plumarius (Pheasant's Eye Pink)**—A semi-double hardy variety clove scented. Flowers blush white shaded with deep crimson and maroon. Pkt.....10c



ESCHSCHOLTZIA CALIFORNICA

GAILLARDIA.

A splendid class of showy bedding or border plants which produce in greatest profusion daisy-like flowers 2 to 2½ inches across, comprising mostly yellow and red shades. Blooms are borne on long stems well above the foliage and are excellent for cutting. Single varieties somewhat resemble in shape miniature sunflowers, while the double form dense heads. Height 1 to 1½ ft. Seed may be sown early in the spring, thinned out or transplanted.

604 **Picta**—Single, purplish crimson and yellow. Plants about 1 ft. high. Oz., **20c.** Pkt.....5c

605 **Lorenziana**—Gaily colored flowers which are double, and have tubular petals. They bloom profusely from July until frost; splendid for cutting. Colors: yellow, orange, wine and claret. Plants grow 1 to 1½ ft. in height and will usually bloom the full season. Oz., **25c.** Pkt.....5c

606 **Kelway's Hybrids (Grandiflora)**—A beautiful hardy perennial blooming the first season from seed. Flowers often 3 inches across with flat petals and comprising mostly orange and scarlet shades. This is the most beautiful strain of hardy Gaillardia ever offered and comprises the most gorgeous and brilliant shadings and colors. Pkt.....10c

GODETIA THE BRIDE

Forgetmenot (Myosotis.)

An old-fashioned favorite bearing in profusion clusters of dainty blue, five petal blossoms. It thrives best in the shady or moist situation For blooming the first year, seed should be started indoors in February or March and transplanted when the weather is warm or they can be sown in open borders in March where they are to bloom, or in the fall. H. P. 6 to 8 inches in height.

601 **Alpestris**—Plants are compact, bushy habit; finely cut foliage. Flowers blue with very small eye. Oz., **50c.** Pkt.....5c

Four O'Clock (Marvel of Peru.)

Old-fashioned flowers which are borne on erect, bushy plants, 2 to 3 ft. high. They bloom in greatest profusion and comprise many beautiful, brilliant colors. Flowers are large tube shaped, opening in the afternoon and remaining open all night, and close again in the morning. Many beautiful shades are comprised including white, red, striped, blotched, etc. Very desirable for borders and backgrounds for lower growing plants. Time of blooming from summer to late fall. Seed can be started early and transplanted if desired, or planted in open borders 2 to 3 ft. apart, thinning to one plant. H. A.

602 **Mixed**—Comprises all shades. Oz., **20c.** Pkt.....5c

Fox Glove (Digitalis.)

Stately, old-fashioned perennials which are excellent for borders, producing large spikes of pendulous, brilliant colored flowers on upright stems. The blooms are thimble-like, drooping and colors include white, lavender, rose, many of which are spotted and blotched. Leaves are wrinkled and ornamental having a soft downy like appearance and bear the flowers well above the foliage on long spikes. Height 3 to 5 ft. Seed may be sown early in the spring outdoors and thinned or transplanted or sown in the fall.

603 **Mixed Colors**—Oz., **40c.** Pkt.....5c

Geranium.

One of the most popular of all bedding plants comprising many shades of brilliant colors. When properly grown there is a constant succession of bloom from early summer until frost. The leaves are rounded with a soft down and zoned or marked.

Seed is very slow to germinate and must be sown in light soil in shallow boxes and transplanted to small pots as soon as ready to handle, then shifted to larger pots, transplanting to open ground in beds or borders as soon as the weather has become settled and warm.

604 **Scarlet Mixed (Zonale)**—Half hardy perennial attaining height of about 2 ft. Our stock will produce a large percent of double flowers in shades of scarlet and red. Pkt.....10c

605 **Apple Scented**—A tender perennial producing an abundance of small sized leaves which have delicate fragrance. They can be dried in the shade and used for sachet or scenting linens. Pkt.....25c

Globe Amaranth (Bachelor's Button.)

One of the best of all "everlastings" which makes a showy border plant or for bedding as a background or foreground for other plants. It has small globular flower heads of brilliant colors, mostly white and crimson which can be cut soon after maturing and will retain their beauty throughout the winter.

The seed can be started in boxes and transplanted to where they are to bloom or sown in open border and thinned or transplanted to 1 to 1½ ft. apart. H. H. A.

GODETIA.

A hardy annual, growing 1 to 1½ ft. high which is one of the most attractive of garden plants for bedding and borders. The flowers are borne in short close spikes on leafy branches which produce very freely. They are single, of delicate shadings and satiny texture. Included in this class of plants is the Evening Primrose.

Seed can be sown outdoors where they are to bloom or if wanted early, start in hot beds. Can be used as pot plants as well as for bedding.

608 **The Bride**—Large, rich, satiny, white flowers borne in abundance. Oz., **30c.** Pkt.....5c

609 **Lady Albemarle**—Carmine and crimson; compact habit. Oz., **30c.** Pkt.....5c

610 **Fine Mixed**—Comprises many shades, white, pink, crimson, etc. Oz., **25c.** Pkt.....5c

HELIANTHUS (Sunflower.)

Well known annuals, producing various types of flowers some of which are small and single with brown or black centers, others producing medium size double heads, very full of florets, while others produce enormous single and double heads. They grow in various heights and are adapted for many purposes, such as backgrounds for other plants, large beds and masses in borders.

Our list comprises improved varieties; some of them are suitable for cutting, being produced on long stems of good length.

Seed is usually sown out of doors where they are to bloom, thinning out according to the height of the variety when plants are 3 to 4 inches high. They do well in almost any soil.

611 **Double Chrysanthemum Flowered**—An attractive sort producing very double flowers often 8 to 10 inches across with long fringed petals which resemble chrysanthemums. Color rich golden yellow, has no black center. Plants usually attain height of 7 ft. produced profusely and are excellent as background or screen. Oz., **25c.** Pkt.....5c

612 **Double California**—A very double variety comprising various shades of yellow and orange, very free flowering, attaining a height of about 4 ft. Florets are set very closely which make it intensely double. Flowers are 4 to 5 inches in diameter, grown in great profusion. Oz., **25c.** Pkt.....5c

613 **Stella**—One of the most attractive of all single Sunflowers, being extremely valuable as a border plant or foruse in large beds and most desirable for cutting for home decoration. Flowers are about 3 inches in diameter, of bright golden yellow with black disk or centers and are borne on long stems. They are early blooming and extremely free flowering throughout the season. Plants grow about 3 ft. high well branched and produce abundantly. Oz., **40c.** Pkt.....5c

HELIANTHUS STELLA

606 **Mixed**—Comprising shades of crimson, purple, striped, white, etc. Height about 18 inches. Oz., **30c.** Pkt....5c

607 **Dwarf Red (Nana Compacta Rubra)**—A dwarf sort producing masses of brilliant purplish crimson blooms. Height one ft. Oz., **40c.** Pkt.....5c

HELIOTROPE.

A well known and popular class of tender annuals which are largely used as border and bedding plants and quite frequently grown in the house for winter blooming. They have a sweet odor resembling cherry pie. Flowers are blue, purple and white, borne in clusters.

Seed must be started early in the house, in shallow boxes and transplanted and moved to the garden after danger of frost. They are well adapted for partial shady situations and bloom continuously until frost.

615 **LEMOINE'S GIANT**—A mammoth flowering variety having enormous quantities of flowers and trusses sometimes measuring 10 to 12 inches across; fragrant, most delicious and powerful. Colors vary from pure white through the various shades of blue and purple to indigo. Pkt.....15c

616 **CHOICE MIXED**—A good strain of Heliotrope which will produce thrifty free flowering plants. Pkt.....10c

HOLLYHOCK.

Upright and hardy perennials which are well known. They are largely used as a background for other plants or as a screen, attaining a height usually of 5 ft. The rich double blossoms range from deep yellow, white, pink, red, purple, etc., are very attractive.

The seed we offer produces the best double blooms resembling rosettes. Hollyhocks can be sown in open border, transplanting when the plants are large enough to permanent position, setting 1½ to 2 ft. apart. They bloom the second season. Seed can also be sown in August.

617 **DOUBLE WHITE**—An improved strain producing perfect double flowers. Pkt.....10c

618 **DOUBLE PINK**—Soft rose color changing to darker pink with age. Pkt..10c

619 **DOUBLE SCARLET**—Very brilliant. Pkt.....10c

620 **DOUBLE YELLOW**—A bright lemon color. Pkt.....10c

621 **DOUBLE MIXED**—Comprises all shades. Pkt.....5c

622 **ALLEGHENY**—Flowers are distinct having edges of the petals finely fringed. They are large size, come fairly double, and are usually valuable on account of the fringed appearance of the petals. Our strain comprises a good range of soft rich colors. Pkt.....10c

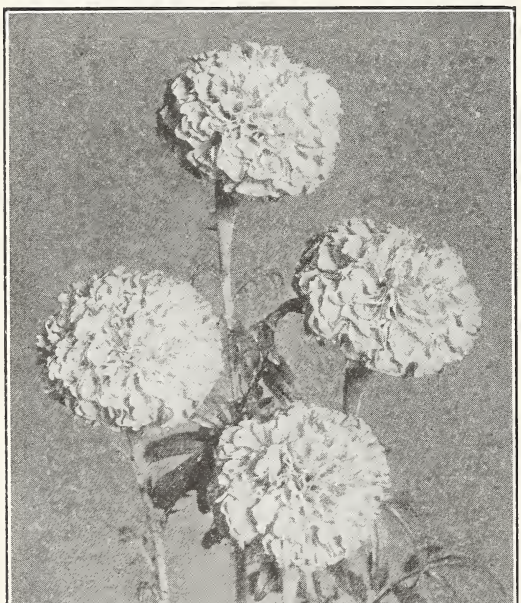
HOLLYHOCK.

KOCHIA—Tricophylla (Mexican Fire Bush.)

(Also called Burning Bush and Summer Cypress)

625 A quick growing foliage or hedge plant which forms symmetrical globe shaped plants about 3 ft high. The foliage is cypress-like in appearance being finely cut, clean green color. Early in the fall it is covered with innumerable little flowers which cause the plant to take on a reddish tinge—hence, the name Fire Bush. It is one of the most effectual quick growing screen or hedge plants and extremely ornamental when planted in clumps or singly. If planted together, set at least 2 to 2½ feet apart.

Seed can be started early indoors and transplanted, or sown in open border and transplanted or thinned out. H. A. Oz., **30c**; pkt.....5c



AFRICAN MARIGOLD.

LANTANA.

A pleasinge lass of bedding plants which grow somewhat in shrub form and produce in late summer or autumn an abundance of Heliothrope like clusters of single flowers which change in color. Afterwards green berries are borne which turn deep blue. Flowers have a peculiar odor, somewhat resembling Russian leather. T. P. Height, 2 feet.

626 **FINEST MIXED VARIETIES**—Oz., **30c.** Pkt.....5c

LARKSPUR—Annual.

These are very desirable for bedding, producing large spikes of double flowers in many shades. Seed should be sown in open border where they are to bloom thinning out as desired.

627 **DWARF DOUBLE ROCKET**—Beautiful spikes of double flowers, white, pink, lavender, light blue, etc. Grows one foot high. Oz., **25c.** Pkt.....5c

628 **TALL BRANCHING**—A hardy annual 2 feet high, producing large double flowers on spikes 15 inches long. Colors rose, white and shades of blue. Valuable for cutting. Oz., **25c.** Pkt.....5c

LOBELIA.

A charming plant well adapted for hanging baskets, vases, pots, rockeries and quite often used for bedding. They make a very neat edging for beds of white flowers being extremely effective if planted in masses. Flowers are borne in great profusion and last for a long time. They are usually deep blue color with somewhat lighter centers and borne in clusters.

Seed should be sown very early indoors, transplanting to pots or if sown out of doors cover extremely lightly. H. H. A. Usually about 6 inches high.

629 **CRYSTAL PALACE**—An exceptional graceful sort which is desirable for hanging baskets, vases, etc. Flowers are deep, intense blue, borne in great profusion. Foliage dark green. Pkt.....5c

630 **DWARF COMPACT**—Particularly suitable for edgings and bedding. Flowers brilliant blue borne in such profusion as to almost cover the plant. Pkt.....10c

MARIGOLD.

A very popular old-fashoined garden annual which is remarkable for its brilliant display of yellow and orange flowers which are borne in greatest profusion from early Summer till frost. The African varieties are tall, usually 2 to 3 ft. high and well adapted for large beds, backgrounds or mixed borders. The French are more dwarf and can be used for borders and bedding. All varieties have, finely cut, bright green foliage.

Seed can be sown in open border where they are to bloom or if desired started early in the house but there is no special advantage. According to whether tall or dwarf they should be planted from one foot to 18 inches apart in rows 1½ to 2 feet apart.

631 **AFRICAN DOUBLE ORANGE**—Flowers about 3 inches in diameter, imbricated and extremely double, in tints of primrose, orange and gold. Grows 2 to 3 ft. high. Oz., **40c.** Pkt.....5c

632 **AFRICAN DOUBLE LEMON**—Profuse bloomers, one of the best of the class. Desirable for shrubbery or mixed borders. Oz., **40c**; Pkt.....5c

633 **AFRICAN DOUBLE MIXED**—Comprises various shades and well adapted for large beds or mixed borders. Oz., **30c.** Pkt., 5c

634 **FRENCH DOUBLE MIXED**—Comprising all shades of yellow, orange, brown, striped, etc. Very double. Height 1 ft. to 18 inches. Oz., **40c.** Pkt.....5c

635 **FRENCH COMPACT (Signata Pumila)**—A most attractive dwarf French sort with small bright orange yellow flowers which is most effective for borders or massing. Height about 12 inches. Oz., **40c.** Pkt.....5c

MIGNONETTE.

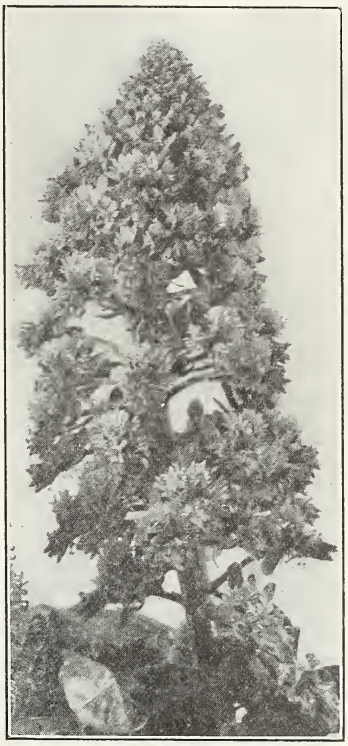
A popular hardy annual producing dense, cone shape spikes made up of thickly set, rather insignificant flowers, yellow, orange, red, etc. The combination of the shading of the petals with the bright green of the spikes, however, is attractive but it is popular mostly on account of its delicious fragrance. Flowers are largely used for bouquets, designs, wearing and for vases in water.

Seed can be sown out of doors, preferably in rows, and thinned out or if desired can be started in the house in shallow boxes and transplanted. Much Mignonette is used for winter forcing and it is profitable for frames and greenhouses as there is always a demand for this favorite flower on account of its delicious fragrance. Grows about 1 ft. high.

631 **Machet**—Of dwarf vigorous growth. Heads very large, produced on stout, flower stalks. Spikes red. One of the best for pot culture and greenhouse forcing. Very free flowering. Oz., **60c.** Pkt. 5c

637 **Allen's Defiance**—An extremely large flowering sort bearing very long spikes of yellowish flowers, largely grown for greenhouse forcing on account of its long spikes and profuse blooming qualities. Oz., **75c.** Pkt. 5c

638 **Sweet**—The well known and popular variety of the gardens producing moderately sized heads in great abundance. Oz., **15c**; ¼ lb., **35c**; lb., **$1.00**; pkt. 5c



ALLEN'S DEFIANCE MIGNONETTE.

NASTURTIUM.

One of the most popular of hardy annuals which is valuable alike for bedding, borders and cutting. Few plants are more easily grown or remain longer in bloom. Foliage is very ornamental having large shield-shape regular leaves, borne on long, slim stems and are of vivid green color. Flowers are irregularly shaped, have five petals and the whole flower is somewhat in the shape of a cone and terminates in a very long spur or point. The two lower petals have at the opening or mouth of the flower a fringe which makes the flower very interesting botanically. Flowers are in many brilliant shades ranging from creamy white through rose, light pink and scarlets together with yellow, orange, brown, maroon, etc., and many flowers are brilliantly spotted. Blooms abundantly from early summer until late fall.

Seed is usually sown outdoors as soon as the weather is settled. If desired can be started in the house and transplanted.

DWARF VARIETIES

These make excellent bedding and border plants, usually attaining a height of about 1 ft. Bloom profusely.

642 **Empress of India**—A small compact plant with very dark foliage; deep scarlet flowers. Oz., **15c**; ¼lb., **40c** pkt. 5c

643 **Chameleon**—Has varied colored flowers changing from day to day. Oz., **15c**; ¼ lb., **40c**; pkt. 5c

644 **Crystal Palace Gem**—Sulphur, yellow spotted carmine. Oz., **15c**; ¼ lb., **40c**; pkt. 5c

645 **Golden King**—Bright golden yellow. Oz., **15c**; ¼ lb., **40c**; pkt. 5c

646 **Pearl**—Creamy white to pale yellow. Oz., **15c**; ¼ lb., **40c**; pkt. 5c

647 **Ruby King**—Bright ruby red with salmon tints. Oz., **15c**; ¼ lb., **40c**; pkt. 5c

648 **Rose**—Bright lively rose pink. Oz., **15c**; ¼ lb., **40c**; pkt. 5c

649 **Spotted King**—Yellow with dark maroon blotches. Oz., **15c**; ¼ lb., **40c**; pkt. 5c

650 **King of Tom Thumbs**—Bright scarlet;vivid green foliage. Oz., **15c**; ¼ lb., **40c**; pkt. 5c

NASTURTIUMS. VARIOUS SORTS.

651 **DWARF MIXED**—Comprises all varieties and shades. Oz., **10c**; ¼ lb., **25c**; lb., **80c**; pkt. 5c

TALL VARIETIES.

These are excellent for growing in beds and borders where there is plenty of room for trailing or for light trellises and for hanging-baskets, vases and window-boxes. Height usually 4 to 5 ft.

652 **Dark Crimson**—Oz., **15c**; ¼ lb., **40c**; pkt. 5c

653 **Chameleon**—Tall variety with varied colored flowers continually changing from day to day. Oz., **15c**; ¼ lb., **40c**; Pkt. 5c

654 **King Theodore**—Rich, velvety, crimson flowers, large size; dark green leaves. Oz., **15c**; ¼ lb, **40c**; pkt. 5c

655 **Orange**—Brilliant shade. Oz., **15c**; ¼ lb., **40c**; pkt. 5c

656 **Spotted**—Yellow, spotted with dark maroon blotches. Oz., **15c**; ¼ lb., **40c**; pkt. 5c

657 **Purple**—Purplish crimson, very effective. Oz., **15c**; ¼ lb., **40c**; pkt. 5c

658 **TALL MIXED**—Comprises all shades in splendid mixture. Oz., **10c**; ¼ lb., **25c**; lb., **80**; pkt. 5c

OTHER TALL SORTS.

659 **LOBBIANUM**—Smaller in leaf and somewhat more compact than the ordinary Tall varieties but very free flowering, having richer and more varied colored blooms. Should be more largely used as it is one of the most effective of the trailing sorts. Mixed colors. Oz., **15c**; ¼ lb., **40c**; lb., **$1.25**; pkt. 5c

660 **VARIEGATED-LEAVED**—A unique sort which has variegated leaves, varying from creamy white to deep green. Its flowers comprise a number of brilliant shades and it is very effective as a foliage plant in addition to its many brilliant colors. Mixed colors. Oz., **15c**; ¼ lb., **40c**; pkt. 5c

661 **TALL IVY-LEAVED SCARLET**—A handsome running sort with star-like pointed leaves, rich veined with white. Flowers are of medium size, distinct in form, having somewhat of a star-like shape. The foliage somewhat resembles English Ivy which in contrast with the glowing scarlet blooms, makes it very effective. Oz., **15c**; ¼ lb., **40c**; 1 lb., **$1.25**; pkt. 5c

Oxalis.

A pleasing class of dwarf growing plants with flowers of moderate size, in many brilliant colors. They are very desirable for greenhouses or in pots, hanging-baskets, rockeries or vases. Also desirable for naturalizing especially in moist or shady places. Colors comprise shades of white, pinks, yellow, ect.

662 **Mixed Varieties**—Pkt. 10c

PANSIES.

One of the most charming of all hardy annuals and deservedly popular. Their modest flowers of brilliant colorings, markings and shades are produced extremely early in the spring and when the weather is not too hot, continue to afford a mass of bloom until mid-summer. There is almost an infinite variety of colors.

The old strains were confined to a few flowers of moderate size but in the improved sorts, which we offer below, there is a wonderful improvement from the old-fashioned Heart's ease.

Seed is usually sown in the fall, wintered over in cool frames and plants transplanted to beds when in bloom very early in the spring.

Seed, however, may be started early in the spring, transplanting to where they are to bloom as soon as the plants are fairly large. Our strain embraces many choice sorts and mixtures as well as the best sorts in separate colors.

663 **J. C. McC. FANCY MIXTURE**—A particularly fine strain comprising all the best shades and brilliantly marked. It is one of the most effective and largest flowered sorts and the flowers are of good substance on stiff stems. Plants are thrifty and extremely free flowering. When properly grown it is of faultless form and wonderfully large. ⅛ oz., **$1.50.** Pkt. 15c

664 **BUGNOT'S MIXED**—A very large stained sort of exceptionally fine quality; most of the flowers being blotched or stained, each petal is marked and the margins usually veined. Many brilliant colors. ⅛ oz., **60c**; pkt. 10c

665 **GIANT TRIMARDEAU**—Flowers of this strain are the largest of all Pansies but it is not quite so thick in substance as most of the other sorts owing to its large size.

666 **Giant Emperor William**—Ultramarine blue with violet eye. ⅛ oz., **30c.** Pkt. 10c

667 **Yellow Giant**—Brilliant golden yellow with black eye. ⅛ oz., **30c.** Pkt. 10c

668 **Giant King of Blacks**—Brilliant shiny black, almost coal black. ⅛ oz., **30c.** Pkt. 10c

669 **Giant Lord Beaconsfield**—Purple violet shading to light blue on the upper petals. ⅛ oz., **30c.** Pkt. 10c

670 **Giant Snow-Flake**—Pure satiny white. ⅛ oz., **30c.** Pkt. 10c

671 **Giant Peacock**—Ultramarine blue, blotched darker. ⅛ oz., **30c.** Pkt. 10c

672 **Giant Trimardeau Mixed**—Flowers are of many brilliant shades, including the above sorts and a score of others. Most flowers have brilliant markings and blotches. On account of its large size and thrifty habit, this is one of the most popular strains for commercial uses. ⅛ oz., **30c**; ¼ oz., **50c**; oz., **$1.75**; pkt . . . 10c

673 **CHOICE MIXED PANSY**—A good English strain, comprising many shades and colors. The flowers are fairly large size, well marked and very free blooming. ¼ oz., **25c**; Oz., **75c**; Pkt. 5c

PHLOX DRUMMONDII—Grandiflora.

J. C. McC. FANCY MIXTURE.

PETUNIA.

One of the most desirable half-hardy annuals for bedding and particularly effective if massed. It is also desirable for window-boxes or vases. The improved strain of Petunias are very much more brilliant, finely marked and gorgeous than the old-fashioned free blooming sorts of our gardens.

The flowers are extremely large, some of them with marked throats and others with fringed edges. The double Petunias have been used by florists for a long period of years and still retain a great deal of their popularity but it is to the single Petunias that the popularity of this wonderful bedding plant is to be attributed.

For earliest blooming outdoors, seed is started in shallow boxes and shifted to pots, then transplanted to beds. Or seed may be sown in open border where they are to bloom, thinning out as necessary or transplanting, usually allowing about 1 ft. to 18 inches between plants. They begin to flower when quite small and continue the whole season until frost, affording a mass of brilliant coloring.

675 **Ruffled Giants**—An improved strain of California Petunias, flowers often measuring 3 to 4 inches across. Its colors comprise all shades from purest white through rose, pink, carmine and purple. Most of the flowers are brilliantly marked, veined and fringed. Altogether one of the most effective strain of this popular flower. Pkt. 25c

676 **Large Flowering Mixed**—A very select English strain which has very large flowers and an exceedingly fine range of shades and markings. Pkt. 10c

677 **Choice Single Mixed**—A fair mixture of good coloring which bear moderately sized flowers and extemely free flowering. Oz., **50c.** Pkt. 5c

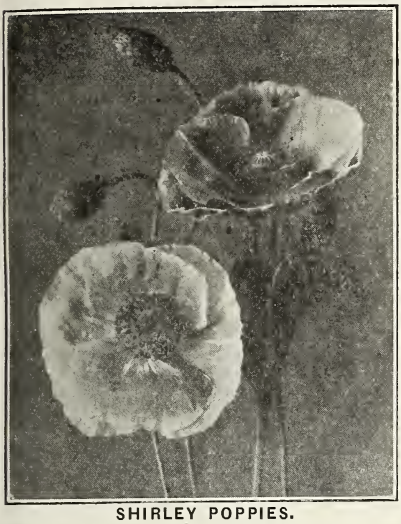
678 **Double Fringed Mixed**—Many brilliant colors; flowers beautifully fringed. Pkt. 25c

PHLOX.

One of the most pleasing classes of Hardy Annuals and Perennials which are deservedly popular as they are unexcelled in a magnificent display of their many and brilliant colored flowers. They grow in somewhat bush-like form and with many broad flat top clusters of nearly round flowers, which range through various shades from pure white, rose, pink, crimson to very dark maroon. Some of them are called Oculata Varieties, having a distinct dark eye surrounded by a lighter shade. They are especially attractive in masses or ribbon beds of contrasting colors and in addition to their fine bedding qualities are excellent for window-boxes; sometimes used in vases and hanging baskets. They bloom early in the season and last in an uninterrupted succession until fall. Are excellent for cutting and graceful in decoration.

Seed can be sown out of doors where they are to bloom, thinning out as may be necessary or they can be started in boxes and transplanted if desired. The Perennial Varieties can be easily raised from seed and seed can either be sown in spring or in the fall. If sown in the fall they bloom the following season.

For Varieties, see next page.



SHIRLEY POPPIES.

POPPIES.

Well known and popular Annuals and Perennials which produce flowers varying from moderate sized single cup-shape blooms to very much larger flowers sometimes 4 inches across both single and double. Colors are extremely vivid and brilliant; very graceful, hence, fine for cutting and for home decoration. Grown in beds and masses nothing is more brilliant in the garden and they are of easiest culture.

Seed is sown early out of doors where they are to bloom, thinning out according to size of plants from 6 to 12 inches apart. To insure a long season of blooming the flowers should be cut regularly and no pods allowed to form.

ANNUAL VARIETIES.

690 **SHIRLEY**—A beautiful sort which blooms a long season and bears large single flowers of flat but artistic shape. Most petals are of very silky texture with and intense sheen. Others plain, some crimpled, some like tissue paper and other wavy. Colors range through shades of pink, rose, scarlet, carmine and are generally edged with lighter shades. If cut before blossoms are fully expanded they will open in water and remain fresh for full day. Height about 18 inches. **Choicest Mixed Colors**—Oz., **30c**; pkt. **5c**

691 **TULIP**—One of the most brilliant of poppies, bearing bright scarlet tulip shaped flowers with a dark spot at the base of each petal. It makes a gorgeous display in masses. Grows about one foot high. Oz., **60c.** Pkt. **5c**

692 **CARDINAL**—A double sort having very large blooms and the petals so finely cut that the blossoms have the appearance of a large ball of brilliant scarlet silk. It is one of the finest of all double sorts. Height about 2 ft. Oz., **30c.** Pkt. **5c**

PHLOX DRUMMONDII—Grandiflora.

Hardy Annuals growing about 2 ft. high producing the largest size blooms in brilliant display and range of colors.

680 **Alba**—Pure white in large clusters. Oz., **90c.** Pkt. **10c**

681 **Rose**—Soft rose with distinct eye. Oz., **90c.** Pkt. **10c**

682 **Crimson**—Brilliant shade. Oz., **90c.** Pkt. **10c**

683 **Alba Oculata**—Pure white with crimson eye. Oz., **90c.** Pkt. **10c**

684 **Atropurpurea**—Dark purplish maroon. Oz., **90c.** Pkt. . **10c**

685 **GRANDIFLORA MIXED**—An extra choice strain of the best large flowered varieties, unexcelled in profusion and brilliancy of bloom and color. Oz., **60c.** Pkt. **5c**

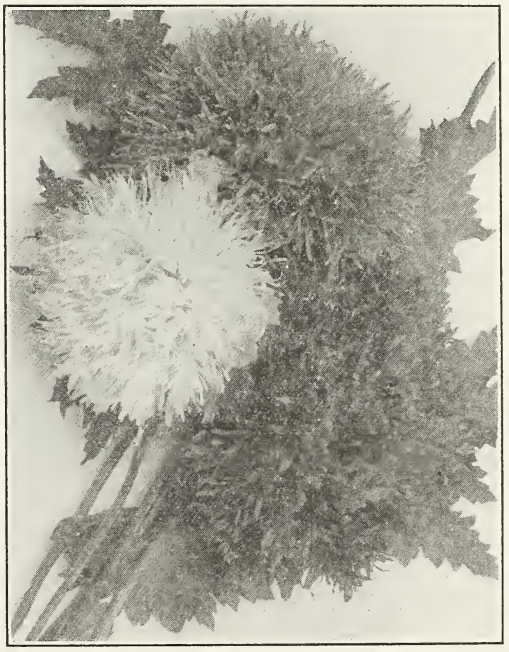
686 **CHOICE MIXED**—The ordinary Phlox Drummondii. Oz., **50c.** Pkt. **5c**

687 **STAR OF QUEDLINGBURG**—A dwarf growing sort which has bright star-shaped and fringed flowers which are exceedingly attractive. They have many brilliant colors, some of them solid colors edged with other shades and should be largely planted. Oz., **90c.** Pkt. . **10c**

688 **PERENNIAL**—These produce large clusters of brilliant colors which remain in bloom quite a long time. Plants usually attain a height of 3 to 4 ft. It is one of the best Herbaceous Perennials for large beds or massing with shrubbery, etc. **Choicest Mixture.** Pkt. . **10c**

PINKS—See Dianthus.

ICELAND POPPIES.



DOUBLE POPPIES. VARIOUS SORTS.

ANNUAL VARIETIES—(Cont'd.)

693 **MAID OF THE MIST**—One of the best double white annual sorts producing immense heads. Petals are small and fringed and blooms are immense balls of snowy whiteness. Excellent contrast to Cardinal. Height 2 ft. Oz., **30c.** Pkt. **5c**

694 **CARNATION FLOWERED MIXED**—A large, showy, double, fringed variety of various colors. Height about 2 ft. Oz., **20c.** Pkt. **5c**

695 **PEONY FLOWERED MIXED**—Very large, double Poppies with somewhat broader petals in many pleasing shades. Height about 2 ft. Oz., **20c.** Pkt. . . **5c**

PERENNIAL VARIETIES.

These should be in rows about 1½ ft. apart and 1 ft. apart in the row. Seed may be sown outdoors either in spring or fall.

696 **ORIENTALE, SCARLET**—One of the most showy of all Perennial Poppies. Grows about 2 ft. high. Flowers are very large, single, a gorgeous scarlet shading to deep purplish black at the base. Flowers are borne on long stems and splendid for cutting. An excellent sort for mixed beds of Perennials or for borders. Pkt. **10c**

697 **Orientale Mixed.** Pkt. **10c**

698 **ICELAND**—A beautful hardy perennial Poppy which should be grown in every garden. It has lovely light yellow and orange flowers, produced on long stiff stems which are excellent for cutting. They bloom continuously from April throughout the summer until fall. Height about 1½ ft. Pkt. **5c**

PORTULACA (Moss Flowers.)

These are excellent for bedding, vases, rockeries or window-boxes, producing a dazzling display of colors. Single varieties have cup shaped flowers about 1 inch across, range through many shades of white, pink, yellow, orange, red and some are striped. The Double varieties have narrow petals which are set closely and form full heads. Stems and leaves are succulent, creeping and ornamental. They will stand a great amount of drought and bloom through a long season.

Seed should be sown outdoors after the weather is warm, covered very lightly and germinate better if sown in small rows rather than broadcast. Thin to 2 or 3 inches apart. If sown broadcast soil should be sifted over them so as not to cover too deep. A bright, sunny situation is particularly suited to Portulaca. Height about 9 inches.

699 **Single Mixed**—Comprises a wide range of colors. Oz., **35c.** Pkt.....**5c**

700 **Double Mixed**—Many beautiful shades. Pkt.....**10c**

PRIMULA

Primula.

One of the best green house pot plants blooming in winter and especially admired on account of its brilliant colored, finely formed flowers and fine foliage. Ir can be had in perfection from November until spring. Flowers are borne in large clusters and comprise many brilliant shades varying from white through pinks, crimson to intense maroon. Individual flowers measure about 1 inch in diameter and fringed. Greenhouse perennial, growing 8 to 10 inches in height.

Seed should be sown in shallow boxes from April to the last of July, covered lightly and transplanted to small pots when ready to handle, then shifted to larger pots in which they are to bloom.

701 **Chinese Fringed (Chinensis Fimbriata)**—Choice mixed. Large flowering. Comprising all shades. One of the best strains grown. Pkt.....**25c**

702 **Obconica**—A somewhat smaller growing sort which is very free flowering, and not only desirable for pots but can be used out of doors in sheltered beds. Flowers are not so large as the preceding sorts. Height about 9 inches. The color is white shaded with a light stinge of lilac. Pkt.....**10c**

Pyrethrum, Aureum (Golden Feather).

Well adapted for bedding, borders and edgings, its bright, golden foliage contrasting delightfully with the dark green shades of other plants. It is also excellent for planting with white leaved plants such as Dusty Miller, etc. A half hardy annual, treated like a perennial. The seed can be sown early out doors, thinned out as desired, or started earlier in doors and transplanted. The flowers are white, daisy like, borne in clusters. Height 1 foot.

703 Pkt.....**5c**

RICINUS (Castor Bean).

A magnificent sub-tropical plant which attains a great height and is especially desirable for centers of large beds or as backgrounds for other flowers or foliage plants. Can also be used in clusters or singly as ornamental plants on lawns.

The stems attain large size, sometimes 4 inches thick and both these and the foliage are very ornamental. The palm-like leaves are very large, sometimes 24 to 30 inches across, star-shaped, and the whole plant will sometimes attain a size of a small tree in a single season.

RICINUS—CONT'D.

The foliage is of various kinds, some light green leaves with light stems and others darker shade and dark stems. It is grown for its foliage almost exclusively as the flowers are insignificant, being borne on stiff upright stalks, which are afterwards followed by green prickly seed pods. Height according to soil, moisture and conditions, varies from 6 to 15 ft. H. H. A.

Seed can be planted after ground is warm where they are to bloom, dropping about 3 seeds together, about 4 ft. apart. After the plants are up, thin to one plant.

704 **ZANZIBARIENSIS**—Grows to immense size. Leaves sometimes measure 30 inches across and range in color from bright green to deep bronze. Choice mixed colors. Oz., **20c.** Pkt.....**5c**

705 **MIXED SORTS**—A desirable mixture of all varieties. Oz., **15c.** Pkt.....**5c**

SALVIA (Scarlet Sage).

One of the most useful and effective bedding plants which produces immense masses of brilliant Turkey Red flowers from early in the season, continuing in uninterrupted succession until frost. Blooms are borne on long spikes well above the foliage and continue in good condition a long time. Spikes are often 8 to 10 inches long and have 30 to 40 tube-like flowers, borne in a feathery manner on each side of the stem.

Seed should be started in boxes, hot beds or greenhouse, transplanted and set out of doors after the weather has become warm. T. P. Blooming the first season.

707 **SPLENDENS**—Tall growing sort with dark green foliage and bright fiery scarlet blooms. Height 2½ to 3 ft. ¼ oz., **50c**; oz., **$1.75**; pkt.....**10c**

708 **BON FIRE**—A uniformly dwarf sort which blooms earlier than other sorts and remains in flower the whole season. The plant is literally covered with brilliant red flower spikes and the effect of even a single plant is remarkable. Height about 2 ft. Pkt.....**10c**

Salpiglossis.

A very showy, half-hardy Annual which is desirable both for bedding or border plants. Has richly colored funnel-shaped flowers of many shades including yellow, buff, crimson and scarlet and extend through to purple and almost black. Flowers are of satiny appearance, beautifully marbled and penciled. Useful for cutting and blooms from late summer until frost.

706 **Tall Finest Mixed**—Height 2 ft. Pkt.....**5c**

711 **SHASTA DAISY**—A hardy, robust variety of Perennial Chrysanthemum, bearing large daisy-like flowers, which sometimes measure 4 inches in diameter. The petals are set in 3 or 4 rows, long, slender snow-white and surround a small yellow eye. The flowers are borne on long, stout stems, sometimes 18 inches to 2 feet long, hence are splendid for cutting. They are desirable for beds or borders, being very free blooming and easily grown from seed. Height 3 to 4 feet. ¼ oz., **50c.** Pkt.....**10c**

SHASTA DAISY

SCABIOSA (Mourning Bride).

One of the old fashioned popular Annuals which produce an abundance of many colored flowers which are most graceful and excellent for cutting. The blossoms are borne on long stems, are fragrant, double, usually about 10 inches across and somewhat in the shape of a pin cushion. It makes an effective garden plant for bedding or borders and is most desirable for cutting both for commercial uses as well as home decoration.

Seed can be sown in open border and thinned out from 1 to 1½ ft. apart. H. A. growing 2 to 2½ ft. high.

709 **Double White**—An excellent sort producing large flowers which are excellent for florists' use or home decoration. Pkt.....5c

709A **Double Yellow**—Pkt.....5c

709B **Double Purple**—Pkt.....5c

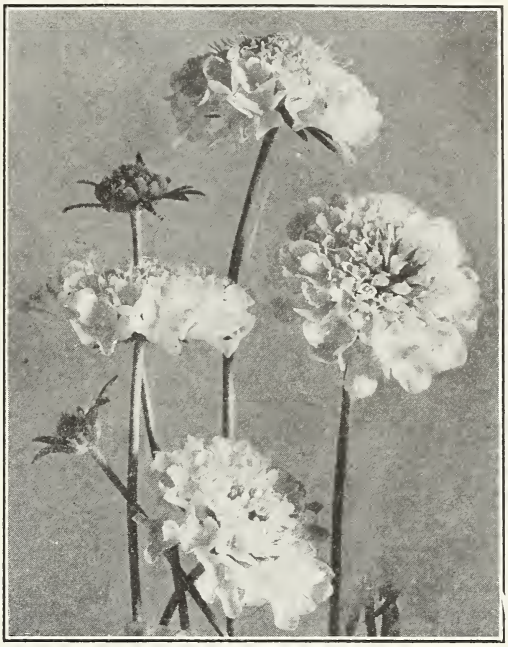
710 **Dwarf Double Mixed**—Comprises a wonderful brilliancy in shades and colors, excellent for small beds or low borders. Height about 1½ ft. Oz., **20c.** Pkt.....5c

710A **Tall Double Mixed**—A splendid sort for large beds or borders. Comprise many beautiful colors. Height 2½ ft. Oz., **20c.** Pkt..5c

SCHIZANTHUS (Butterfly Flower or Poor Man's Orchid.)

An attractive hardy Annual growing about 20 inches high which is of neat, compact growth with finely cut foliage. The plant bears very attractive flowers ranging in colors from white to purple and are shaded from their edges to throats with darker colors. Flowers resemble somewhat the butterfly and are borne in clusters or spikes.

BEAUTY OF NICE



SCABIOSA—DOUBLE WHITE

Seed can be sown outdoors after danger of frost or started earlier indoors and transplanted. They also make very attractive pot plants.

711 **Finest Mixed Colors**—Pkt.....5c

SENSITIVE PLANT (Mimosa Pudica.)

A unique attractive plant which bears rather insignificant globular heads of small pink flowers. It is chiefly attractive, however, from the extreme irritability of its leaves which close or droop at the slightest touch or in a strong breeze. Thay also close in cloudy, damp weather and at night.

Seed may be started early in the house and transplanted to pots or can be used in beds, borders or as pot plants. T. A. Height 1½ ft.

712 Pkt.....5c

STOCK.

A very plea sing class of Hardy Annuals which are very largely used commercially and almosy indispensable to some growers. They should be more largely used in the garden as they produce dense spikes of very fragrant and beautiful rose-like double flowers in a wide range of colors. They are particularly desirable for edging, bedding and pot culture; are suitable for cutting as the flowers are produced on long stems of good length and there is a pleasing contrast between the brilliant colored flowers and the dark effective foliage.

Seed should be started early indoors in shallow boxes and transplanted to small pots afterwards being shifted to larger pots or transplanted to the garden. Or seed can be sown out of doors in rows preferably 15 inches apart, thinning plants to 6 or 8 inches apart. Height of plants usually 1 to 1½ ft.

713 **Princess Alice**—A tall growing branched Stock producing a large number of white, double blooms which are most excellent for cutting. Pkt.....10c

714 **Beauty of Nice**—A late blooming sort which is most desirable for cut flowers and excellent for decoration. Flowers are very double, pure white. Pkt.....10c

715 **Large Flowered Mixed**—A splendid mixture of double, German 10 Weeks' Stock. It comprises shades of white, red, purple, lavender, maroon, etc. Oz., **$1.00.** Pkt.....5c

SWEET PEAS.

One of the most popular of all the hardy climbing annuals and suitable both for small gardens as well as extensive culture in large areas. Properly grown they will start flowering very early in the season and continue in uninterrupted succession until midsummer; in cool northern climates, even until fall. No flower lends itself more to graceful decoration, and they are most popular for wearing on account of their delicate fragrance and very charming graceful effects and exquisite colorings.

The improved types of Sweet Peas are so wonderfully superior to the old fashioned sorts, that they have become one of the most popular flowers in America. We offer below two distinct types, as follows:

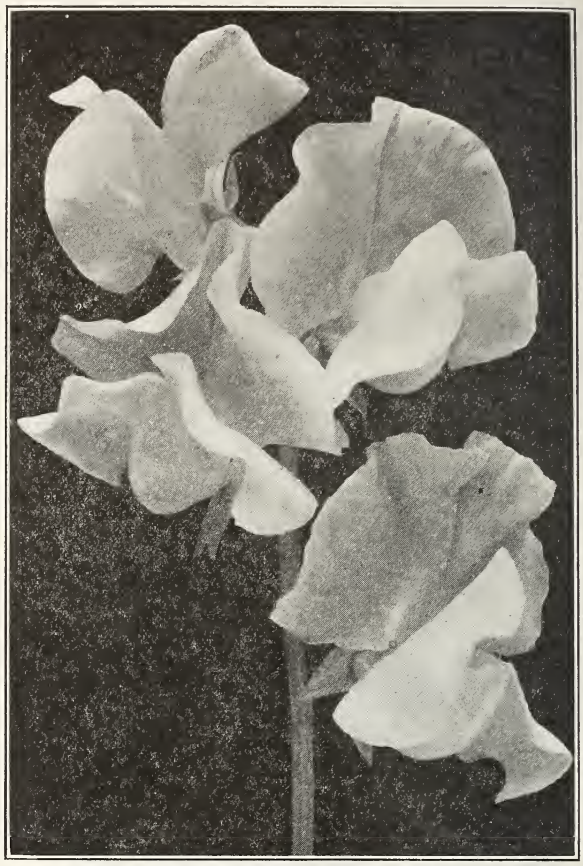
The **Grandiflora** types are large flowered, robust growing Sweet Peas, which are very free blooming, and comprise all shades, markings and colorings to suit the most fastidious taste. As a general rule, they are best for general planting, costing less and giving good returns.

The **SPENCER** type or "Orchid Flowered" are very much improved, large flowered varieties most of which have wavy, fluted and frilled petals. They comprise a wonderful collection of shades and colors and of the largest and finest types of bloom. Spencers are very shy seeders, hence higher than the ordinary "Grandiflora" types. They do not require such constant picking as the Grandiflora sorts, hence even if picking is neglected will bloom longer.

CULTURE—For the best results from Sweet Peas the ground must be very deeply spaded, finely pulverized and gotten in good condition. If the soil is light and loamy, plant at least 4 inches deep, just as early as possible in the Spring. If very heavy, open a trench about 5 inches deep and put in 1 inch of light soil or sand at the bottom, then cover the seed about 1 inch deep. After the plants are through this, add more soil and keep banking up. Well pulverized deep soil with early and deep planting will insure a much longer season of blooming. Seed should not be sown too thickly in the row, and after the plants are up, it is better to thin to 6 to 12 inches apart, giving room for proper development of the vines. They can be trailed on strings, brush or wire netting, as may be desired. Cultivation with a hoe should continue 'till they begin blooming.

INSECT REMEDIES—For the Black Fly or Aphis, spray with a solution of Tobacco or Kerosene Emulsion. For Red Spider spray with clear water.

FERTILIZERS—Well rotted cow manure or Pulverized Sheep Manure will give good results on Sweet Peas. It can be applied either dry or in liquid form, but not sprinkled on the vines.



WHITE SPENCER SWEET PEAS.

INOCULATION—We cannot recommend too strongly that Sweet Pea seed be treated with Inoculation Bacteria before planting. We have had it prepared especially for this crop. It is easy to treat the seed and in nearly all cases will produce a most wonderful improvement in the growth and flowering of this crop. All legumes have to make a large amount of nodules on the roots to make a thrifty growth.

LEGUME INOCULATION FOR SWEET PEAS—Price per small bottle, **25c. Acre Size, 50c.** The small bottles are sufficient for from 1 oz. to 1 lb. of seed.

GENERAL REMARKS—In very dry weather watering the ground thoroughly once a week will be decidedly beneficial and is better than light sprinkling. Do not allow the blooms to wither on the vines, as constant picking extends the flowering season.

FALL SOWING OF SWEET PEAS, in this locality and further south, is advised, as they are hardy, will stand the winter without injury, and as a rule produce much finer crops than if sown in the spring. When to be sown in the spring it is much better to have the ground deeply spaded in the fall than to wait for spring to prepare it.

1 ounce sows about 50 ft. In small gardens rows can be 3 feet apart. For field culture, should be wider.

Grandiflora Sweet Peas.

These may be called the Eckford Class and comprise many beautiful sorts. They should be picked continuously and not allowed to wither or pods to form; otherwise stop blooming soon. There are two classes, the "hooded or shell-shaped" and "open" form.

PRICE ALL VARIETIES; PKT., 5c; OZ., 15c; ¼ LB., 50c; POUND PRICES ON REQUEST.

Colors:—

White. 720 **BLANCHE BURPEE**—Large pure white flowers, with large expanded form. Very free flowering.

721 **DOROTHY ECKFORD**—Flowers very large, pure white, shell shaped, extra good substance. One of the best of this class.

722 **EMILY HENDERSON**—Early, free flowering, clear white. Very popular.

Primrose—723 **HON. MRS. E. KENYON**—Clear primrose, yellow, bold, giant-hooded flowers.

Pink and White. 724 **BLANCHE FERRY**—A very early blooming variety, which, while an old sort, is still one of the most popular. Standard, medium size, open form, color bright rose. Wings, large, rounded and nearly white.

Light Pink. 725 **AGNES ECKFORD**—A delicate shade of light pink, medium large in size and of hooded form.
726 **DAINTY**—The flowers are hooded form, white, edged with light pink, borne on very long stems.

Pink and Salmon. 727 **JEANNIE GORDON**—Standard bright rose; wings primrose tinted with light rose.

Pink and Red Striped. 728 **AURORA**—White ground, striped and flaked with orange salmon pink. Very large hooded form

Scarlet. 729 **KING EDWARD VII**—A fine, bright crimson scarlet or pure red of largest size. Flowers open form, well expanded. It is as fine color as Fire Fly, of larger size, better form and more sun-proof. One of the best scarlets.

Lavender. 730 **LADY GRISEL HAMILTON**—A large flower similar in color to Countess of Radnor but nearer blue. It is one of the best of this shade. Has a large hooded form.

731 **LOTTIE ECKFORD**—White heavily shaded with lilac. Wings shaded with a lighter shade of lilac. Both wings and standard have a picotee edge of magenta blue. Pleasing and delicate coloring, large handsome form.

Blue and Purple. 732. **DUKE OF WESTMINSTER**—Standard purple; wings purple shading to violet. Very large size, hooded form.

733 **NAVY BLUE**—A true blue quite distinct. Standard indigo and violet; wings navy blue shading to light blue. Flowers medium size; semi-hooded form.

Mauve and Purple. 734 **MRS. WALTER WRIGHT**—A splendid sort, similar to Dorothy Tennant, but larger. It is very large, rosy purple, changing to rich bluish purple; hooded form.

Spencer Sweet Peas.

These are the largest and most beautifully formed Sweet Peas. They are produced abundantly on long strong stems and will bear longer than the Grandiflora types.

735 **APPLE BLOSSOM SPENCER**—Very large, bold flower of best Spencer form. Standard very bright rose, wings primrose with flush of rose tint. A grand robust variety. Oz., **25c.** Pkt..... 10c

736 **ASTA OHN SPENCER**—The best lavender Sweet Pea. Is more truly a soft pinkish lavender self. Flowers are very large and beautifully waved. A very charming variety. Oz., **25c.** Pkt..... 10c

737 **CLARA CURTIS SPENCER**—A beautifully waved cream, good substance, stems usually having four large flowers—a superior strain of Primrose Spencer. Oz., **25c.** Pkt.. 10c

738 **COUNTESS SPENCER**—The original giant flowered Spencer, with finest waved standard and wings clear pink, deepening somewhat towards the edge, but almost self colored. Still one of the best Sweet Peas of today. Oz., **30c.** Pkt..... 10c

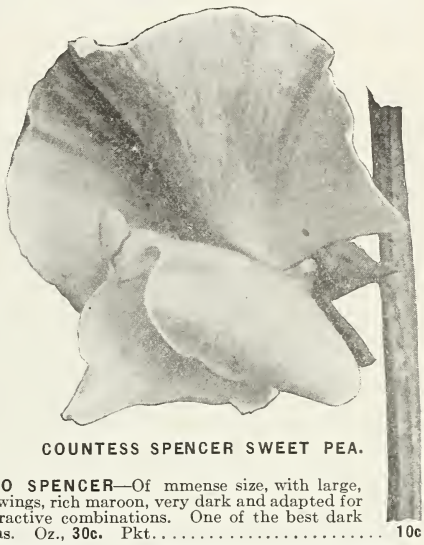
739 **EVELYN HEMUS SPENCER**—Cream color edged with terra cotta pink, like a picotee. Oz., **40c.** Pkt..... 10c

740 **FLORENCE MORSE SPENCER**—Standard richly flushed with a beautiful and distinct shade of pink; wings soft blush pink, giving the flower a charming appearance; very large and wavy. One of the prettiest of Sweet Peas. Oz., **25c;** Pkt..... 10c

741 **KING EDWARD SPENCER**—The best pure red Spencer, very large, with especially immense wings. Every one should grow this variety. Our strain is quite sunproof. Oz., **30c.** Pkt..... 10c

742 **MARIE CORELLI**—A bright glowing crimson, almost self color. Fine large flower, beautifully waved. Oz., **35c.** Pkt..... 10c

743 **MRS. WALTER WRIGHT SPENCER**—A beautiful mauve color, changing to reddish violet. A very large expanded form. Oz., **25c.** Pkt..... 10c



COUNTESS SPENCER SWEET PEA.

744 **OTHELLO SPENCER**—Of mmense size, with large, drooping wings, rich maroon, very dark and adapted for many attractive combinations. One of the best dark Sweet Peas. Oz., **30c.** Pkt..... 10c

745 **SENATOR SPENCER**—A very large and attractive Spencer variety. Chocolate and seal brown, striped, flaked and mottled on ivory white; very distinct and novel and one of the very largest in size. Oz., **25c.** Pkt..... 10c

746 **WHITE SPENCER**—The best Spencer white. Flowers very large and of magnificent Spencer waved form. Stems as a rule carry four blossoms. Oz., **30c.** Pkt... 10c

SWEET PEA MIXTURES.

716 **J. C. McC. BEST GRANDIFLORA MIXTURE**—A wonderful combination consisting of the best Named varieties made up by ourselves and combined in pleasing and harmonious range of colors. Pkt., **5c;** oz., **15c;** ¼ lb., **35c;** lb., **$1.25.**

717 **J. C. McC. BEST SPENCER MIXED**—Comprises the best varieties in all beautiful shades and colors and much superior to that offered indiscriminately as coming from growers. Pkt., **5c;** oz., **25c;** ¼ lb., **75c;** lb., **$2.50.**

718 **CHOICE MIXED SWEET PEAS**—A good mixture made up of Grandiflora types mostly of the older sorts, which will give general satisfaction. Pkt., **5c;** oz., **10c;** ¼ lb., **25c;** lb., **75c.**

719 **CUPID SWEET PEAS**—A dwarf growing class which is excellent for growing in pots or for edgings for flower borders or beds. The blooms while not quite so large as the tall growing sorts are very good form and comprise white and pink colors. Pkt., **5c;** oz., **15c;** ¼ lb., **40c;** lb., **$1.25.**

Sweet William (Dianthus Barbatus.)

A well known old-fashioned perennial which has long been used for beds and borders. It is one of the most desirable plants in the garden, is easily grown, very hardy and free flowering, continuing in bloom for several weeks. The flowers are borne in heads or clusters, sweet scented, in brilliant colors ranging from pure white through pink, crimson, etc., to deep purple. Most of them have two colors in the same flower. They are borne on stiff stems in graceful profusion and the clusters are often 3 to 4 inches across. Useful for cutting.

SWEET WILLIAM (Single).

The seed can be sown in the spring outdoors where they are to bloom or in the fall, thinning out or transplanting at least 1 ft. apart each way. Or they can be sown in the house and transplanted. They form large clumps which can be divided. H. P. Height 1½ ft.

747 **SINGLE MIXED**—Comprises a wide range of colors varying from white, rose, pink, lilac, crimson, maroon to deep purple. Oz., **30c.** Pkt..... 5c

748 **DOUBLE MIXED**—A splendid strain of this beautiful perennial comprising a great variety of excellent shades. Oz., **60c.** Pkt..... 5c

Torenia.

749 **FOURNERI**—A tender annual which has trumpet-like flowers. Plants grow about 10 inches high; are splendidly adapted for hanging baskets, garden vases, window and pot culture. Flowers are pendulous, bright blue with indigo spots. It is most effective, free flowering and of trailing habit. Seed should be started early in the house and transplanted when the plants are large enough to handle or can be sown outdoors in very fine, pulverized soil. Pkt..... 10c

Vinca (Periwinkle.)

Free flowering bedding plants which grow in bushy form and produce round, flat, disk-like flowers, about 2 inches across. They commence to bloom moderately early in the season and the plants are literally covered throughout the summer and fall. Foliage is very distinct, being dark glossy green. Leaves oblong, smooth and in contrast with the brilliant pink and white flowers extremely effective.

For earliest blooming, seed should be started in doors and transplanted to beds or borders, setting at least 1 ft. apart. T. P. Height 18 inches. Blooming the first season.

757 **Pure White.** Pkt..... 5c

758 **Rosea**—Rose with crimson eye. Pkt..... 5c

759 **Mixed**—White and pink. Pkt..... 5c

Wild Flower Garden.

This comprises a mixture of annuals, biennials and perennials and consists of sorts growing at moderate heights. No vines, trailers, or very tall growing plants being used in it.

It will be found very useful for sowing in out of way places and for naturalizing. Where possible, the ground should be roughly raked over before the seed is sown and of course raked again and covered slightly.

779 Large Pkt., **10c.** Oz., **25c.** ¼ Lb., **75c.** 1 Lb..... $2.50

VERBENA.

This has long been a favorite bedding plant and still retains its popularity on account of its very free flowering habit and brilliant display. Flowers are borne in large clusters and comprise many shades from purest white to deep rich purple. They commence blooming early and continue in uninterrupted succession until frost. Very useful for beds and the dwarf varieties for edges. It is trailing in habit and is a desirable plant for garden vases, window boxes, rockeries, etc.

Seed can be started in the house and transplanted to the garden when the weather is warm or sown in the open ground, thinned and transplanted. Verbenas from seed are much more thrifty and less liable to rust than from cuttings. H. H. P. 1 ft. high.

MAMMOTH VERBENA.

A magnificent strain bearing large clusters of showy flowers.

750 **White**—Fine for florists' use or where white summer flowers are desired. Pkt..... 10c

751 **Defiance**—Brilliant scarlet, very effective as a bedding sort. Pkt..... 10c

752 **Pink**—A magnificent shade of lively pink. Heads large. Pkt..... 10c

753 **Light Blue**—A pleasing shade. Pkt..... 10c
Purple—A rich color. Pkt..... 10c

754 **MAMMOTH MIXED**—Comprising a wonderful range of charming colors in every conceivable shade. Oz., **$1.25.** Pkt..... 10c

755 **FINEST MIXED VERBENAS**—A splendid mixture of old-fashioned sorts which comprise a wide range of colors many of the flowers being striped. Oz., **75c.** Pkt..... 5c

756 **LEMON SCENTED (Aloysia Citrodora)**—A tender perennial, producing stiff, shrubby bushes which have bright green, very long serrated leaves. The flowers are insignificant but the leaves have a delicious lemon like fragrance, much desired for use in boxes or for use in linens. It is well known, popular and easy to grow. Seed should be started very early indoors, transplanted to small pots and set in the garden when the ground is thoroughly warm. Pkt..... 10c

Violet.

Modest little plants bearing white and blue flowers on long, slender stems. They are well known and extremely popular on account of their delicate and delicious fragrance. They grow well in shady, damp and moist situations and are used in rockeries.

Seed sown in the fall bloom early the next spring or if sown in the spring will bloom the following year.

760 **Blue**—Pkt..... 10c

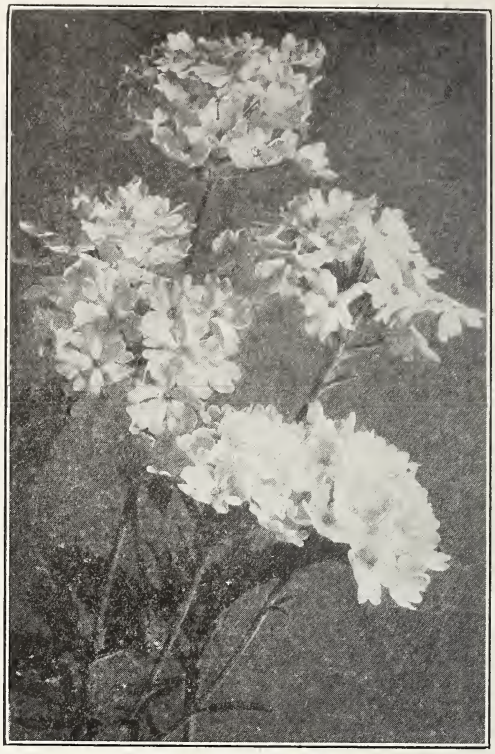
761 **White**—Pkt..... 10c

762 **Mixed**—Pkt..... 10c

Wallflower.

An old-fashioned Hardy Perennial which bears clusters of yellow, orange and red velvety flowers on stiff stems. It is particularly desirable on account of its very delicate and delicious fragrance resembling that of violets. Flowers extremely early and the clusters are borne well above the dark green of the foliage which makes it a desirable bedding plant in addition to its value for cutting.

CURLED AND CRESTED ZINNIA.



MAMMOTH VERBENA.

Wallflower—(Cont'd)

Seed sown in open border in the spring and can be thinned or transplanted and will bloom the following season or can be sown in August. Height about 1½ ft.

763 **Single Mixed**—A splendid strain of English Wallflowers and comprise yellow, brownish red to deep maroon flowers. Oz., **50c.** Pkt..... 5c

764 **Double Mixed**—Deliciously fragrant, perfectly double and comprise shades of orange, yellow, chocolate and purple. Pkt..... 10c

ZINNIA.

One of the most free flowering and brilliant of all garden Annuals. The Tall Varieties are most desirable for tall beds and massing while the Dwarf Varieties are excellent for edging. They form bushy plants and the flowers are borne on long stiff stems. While not particularly graceful for decoration there is no plant which affords a more brilliant display or continues in bloom longer.

The improved sorts are much superior to the old fashioned single Zinnia. They make large heads and many of them have twisted petals, comprising a wonderful range of colors from purest white to darkest maroon. Flowers usually 2 to 2½ inches across very double, imbricated, resembling Dahlias.

Seed can be sown in open border and thinned or transplanted or if desired can be started earlier in the house and transplanted later. H. H. A.

TALL FLOWERING SORTS.

Height 2 ft.

765 **Tall Double White**—Oz., **40c.** Pkt..... 5c

766 **Tall Double Yellow**—Oz., **40c.** Pkt..... 5c

767 **Tall Double Crimson**—Oz., **40c.** Pkt..... 5c

768 **Tall Double Purple**—Oz., **40c.** Pkt..... 5c

769 **TALL DOUBLE MIXED**—Comprises a wonderful range of the best colors. Very double flowers. Oz., **40c.** Pkt 5c

DWARF VARIETIES.

Height about 1 ft.

Very useful for moderately size beds and for borders where a brilliant display of flowers is desired.

770 **Dwarf Double White**—Oz., **50c.** Pkt..... 5c

771 **Dwarf Double Pink**—Oz., **50c.** Pkt..... 5c

772 **Dwarf Double Canary**—Oz., **50c.** Pkt..... 5c

773 **Dwarf Double Orange**—Oz., **50c.** Pkt..... 5c

774 **Fire Ball**—Brilliant crimson. Oz., **50c.** Pkt..... 5c

775 **JACQUEMINOT**—Color of the Jack Rose. Oz., **50c.** Pkt..... 5c

776 **Dwarf Purple Carmine**—Oz., **50c.** Pkt..... 5c

777 **Dwarf Double Mixed**—Comprise a wonderful range of colors, very attractive. Oz., **40c.** Pkt..... 5c

778 **DWARF CURLED AND CRESTED**—Twisted and curled petals which make very effective flowers. Oz., **30c.** Pkt 5c

VINES, CLIMBERS AND TRAILERS

These embrace Annuals, Biennials and Perennials. For information as to culture, see first page of Flower Seeds.

Discount on Packets—For 25c remitted select 35c worth. For 50c remitted, select 75c worth. For $1.00 remitted, select $1.50 worth.

This applies to packets only. Ounces and larger quantities are net, **no discount.**

780 **AMPELOPSIS VEITCHII (Boston Ivy)**—A hardy perennial climber having attractive foliage which turns, according to the season, from light pea green to darker shades and afterwards red. Flowers are insignificant and are afterwards followed by very small purple fruits. It is well known, largely used for covering houses, gateways, garden walls, etc., and is quite attractive. Lends charm to old structures. It grows very quickly, clinging to its support by means of small globular fingers which afterwards flatten out into disks. Can be easily raised from seed. Oz., **50c.** Pkt..... 10c

ASPARAGUS—See Page 48.

781 **BALLOON VINE (Cardiospermum)**—A very attractive trailer, being remarkable for its inflated seed pods which are very light green color and this, with the foliage, makes it extremely ornamental, unique and attractive. It is of rapid growth and graceful; has small insignificant white flowers and attains a height of 6 to 8 ft. Sometimes called "Love in a Puff." T. A. Sow Seed after ground has become warm where they are to grow, thinning out if necessary. Pkt..... 5c

BALSAM—PEAR AND APPLE (Momordica.)

Tender annual climbers bearing ornamental fruits of various colors. They grow 10 to 12 ft. high. Have light green foliage, rather large leaves and are very graceful.

Seed should be planted out of doors when the weather is warm.

782 **BALSAM APPLE**—Like Balsam Pear with foliage smaller and smaller fruits, very nearly round. Green, striped when young, afterwards becoming scarlet. Oz., **25c.** Pkt..... 5c

783 **BALSAM PEAR**—Fruits oblong, pointed and warted, first green, afterwards changing to bright red. When fully ripe, burst open exposing the seed. Largely used for putting in alcohol or whiskey and used as a poultice or for cuts, bruises and wounds. Oz., **30c.** Pkt..... 5c

784 **BRYONOPOSIS**—One of the most attractive of the tender annuals producing small gourd-like fruits about the size of a cherry. The vine is of very quick growth, attaining a height of 10 to 12 ft. and has bright colored foliage which in contrast with the green fruits (which afterwards change to red striped with white) make it extremely attractive. Pkt..... 5c

785 **CANARY BIRD FLOWER**—A beautiful climber with small beautiful, rich yellow flowers and dark foliage, the leaves resembling palm leaves. It is a quick grower attaining a height of 12 ft. Blooms profusely from July until frost. Oz., **35c.** Pkt..... 5c

COBAEA SCANDENS.

CLEMATIS

Well known and popular Perennials which are valuable for trellises, low porches and arbors. They are of various sizes and colors of bloom varying from very small white star-like flowers borne in immense clusters to the large white purple and red sorts.

Seed should be sown early and transplanted or can be sown in the fall. H. P.

786 **FLAMMULA (Virgin's Bower)**—Small white flowers borne in clusters, very sweet scented and of rapid growth. Height 10 to 15 ft. Pkt..... 5c

787 **JACKMAN'S HYBRIDS**—Comprises several strains of medium and large size flowers. Pkt..... 10c

Cobaea Scandens.

An attractive, rapid growing Climber with large bell-shaped flowers which at first are green but gradually change to a deep violet blue. The foliage is handsome, dark green; a great profusion of tendrils is produced and it is valuable for arches, trellises, arbors and attains a height of as much as 30 ft. in a season. T. P.

Seed should be started indoors in shallow boxes using light loamy soil and placing the seed edgewise. Set the young plants in the open when the ground is warm.

788 **Blue**—Oz., **60c.** Pkt..... 5c

Cypress Vine.

A beautiful rapid growing Climber with delicately cut vivid green foliage and star-like flowers which make a most effective contrast with the leaves.

Seed is usually sown outdoors where the plants are to remain, covering 1½ inches deep. T. A. About 15 ft. high.

789 **Scarlet**—A very neat, rich shade. Oz., **30c.** Pkt..... 5c

790 **White**—Clear white. Oz., **30c.** Pkt..... 5c

791 **MIXED**—Mixed scarlet and white. Oz., **25c.** Pkt..... 5c

Gourds.

Well known ornamental Climbers making a rapid growth. The vines are vigorous, have moderately large, round leaves and fruits of many sizes, colors and shapes. Seed should be planted outdoors when the weather is warm and do best in rich soil and sunny situations. T. A. Height 15 to 20 ft.

792 **BOTTLE**—Curious bottle shaped fruits, useful for household purposes. Oz., **25c.** Pkt..... 5c

793 **CALABASH**—The pipe gourd which is so popular. Pkt. 5c

794 **DIPPER**—Round fruits with elongated handle. Pkt... 5c

795 **DISH CLOTH**—Long, green, corrugated fruits, the inside of which is a fibrous mass which when the seeds are removed makes an excellent household sponge. Oz., **30c.** Pkt..... 5c

796 **HERCULES' CLUB**—The longest of all sorts, sometimes 5 ft. Oz., **25c.** Pkt..... 5c

797 **JAPANESE NEST EGG**—Small white fruits which do not crack with heat or cold. Oz., **25c.** Pkt..... 5c

798 **ORANGE**—Well known mock orange. Fruits nearly round, orange color. Oz., **25c.** Pkt..... 5c

799 **MIXED**—Mixture of small sorts including some of the above and many others curiously shaped and ornamental sorts. Oz., **25c.** Pkt..... 5c

800 Humulus Japonicus (Japanese Hop.)

Has rough leaves of variegated colors and very small flowers. It is a very quick growing hardy annual climber attaining a height of 20 ft., and very desirable for covering verandas, porches, buildings or anywhere that dense shade is wanted. Oz., **25c.** Pkt 5c

Hyacinth Bean (Dolichos Lablab.)

A beautiful tender annual climber bearing large clusters of purple and white flowers which are afterwards followed by ornamental purple seed pods. Height 15 to 20 ft.

801 **MIXED COLORS**—Oz., **20c.** Pkt 5c

Ice Plant—(Mesembryanthemum.)

623 Valuable for hanging baskets, rockwork, vases and window boxes. It is curious growing, the leaves and stems appearing as though covered with ice crystals. A tender trailing annual growing about 6 inches high, and the vines will extend 2 ft. long. Pkt..... 5c

Kenilworth Ivy.

624 Valuable for hanging baskets, vases, pots and window boxes. It produces a mass of small, smooth bright green leaves which are extremely attractive. Pkt..... 5c

Maurandia.

A graceful climber with glossy ivy-shaped leaves and bearing an abundance of showy, irregular trumpet-shape flowers, 1½ inches long, which are usually of purplish blue, rose or white colors with lighter throats. It is very attractive and desirable for small trellises, garden vases, hanging baskets and window-boxes where trailing can be allowed.

Seed should be started in the house or hot bed and transplanted. Grows 6 to 10 ft. long.

802 **BARCLAYANA**—Attractive purplish blue flowers with lighter throats. Pkt..... 10c

Moon Flowers (Evening Glory.)

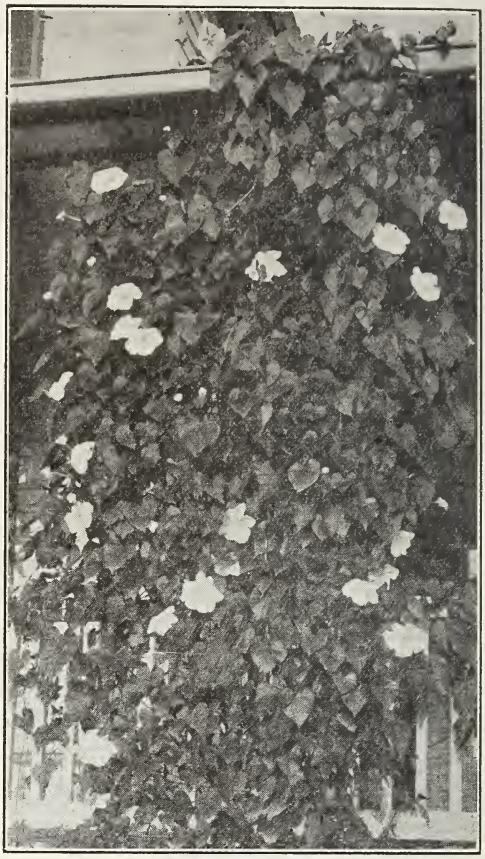
The well known and popular tender perennial so largely used. It grows to an immense height, sometimes 30 to 40 ft. in a single season and is literally covered with large white flowers 3½ to 4 inches across which open in the evening and are very sweet scented. Useful for covering old fences, dead trees, stables, and unsightly places, being extremely rapid growing with a profusion of large leaves.

Seed should be started indoors and transplanted to the open after the weather is warm. As the outer seed shell is particularly hard, a small hole should be filed in it or part shaved off with a knife before planting. Soaking in very warm water 24 hours is beneficial.

803 **MEXICANA**—The well known Moon Flower. (White seeded) Pkt..... 10c

804 **HYBRIDA (Black Seeded)**—An early blooming sort. Flowers not quite so large, blooming 3 to 4 weeks sooner. Very free flowering. Pkt..... 10c

PASSION FLOWER.



MOONFLOWER.

Morning Glories.

The well known and popular hardy annual climbers which produce large trumpet-like flowers of many brilliant colors. Seed is sown where they are to bloom, thinning as may be desired. Height 10 to 15 ft.

805 **JAPANESE**—Flowers of largest size, often 3 inches across, in magnificent colors and brilliantly marked. Oz., **25c.** Pkt..... 5c

806 **MIXED**—A splendid mixture of various shades. Oz., **15c.** Pkt..... 5c

NASTURTIUM—Tall—See Page 55.

Passion Flower.

A hardy perennial climber bearing large, light, sky blue flowers 2½ inches across which have a curoiusly shaped stamen head in the shape of a cross—hence the name. Flowers very attractive and sweet scented. Foliage light green, graceful. Height 15 to 20 ft. Valuable where hardy climbers are desired.

807 **COERULEA**—Light sky blue. Pkt..... 5c

Smilax

808 **SMILAX**—A popular greenhouse climber having graceful foliage largely used in constrast and as a back ground for cut flowers. Seed is sown in hot bed or greenhouse and transplanted to beds. Very rarely used outdoors. T. P. Height about 10 ft. Oz., **60c.** Pkt..... 5c

P. P. SWEET PEAS—See Page 60.

Thunbergia (Black Eyed Susan.)

An attractive climber growing 4 to 6 ft. long which is largely used for garden vases, window-boxes, hanging baskets, etc. Flowers are about 1 inch across being of creamy white, buff and orange colors with very dark brown throats; very free blooming. A very attractive plant both in foliage and in abundance of flowers.

809 **MIXED**—Colors, creamy white, buff and orange. Oz., **60c.** Pkt..... 5c

Wild Cucumber (Echinocystis Lobata.)

810 **WILD CUCUMBER (Echinocystis Lobata)**—A useful and rapid climber of vigorous growth which bears an abundance of foliage and is thickly covered with sprays of small, white fragrant flowers followed by numerous prickly seed pods; valuable for covering old buildings, trellises, porches or anywhere that quick growth is desired. Can be sown very early in the spring or late in fall. H. A. Oz., **20c.** ¼lb., **50c.** Lb., **$1.50.** Pkt.... 5c

SUMMER FLOWERING BULBS.

These include many of our most attractive plants both for foliage and flowers. As a rule they should be planted out of doors after the weather has become settled and warm. After the first frost and the leaves have turned droopy or yellow, take up and put in a dry cellar or some other place where they will not freeze, storing in paper bags or soil preferably, and then replanting the following year.

AMARYLLIS.

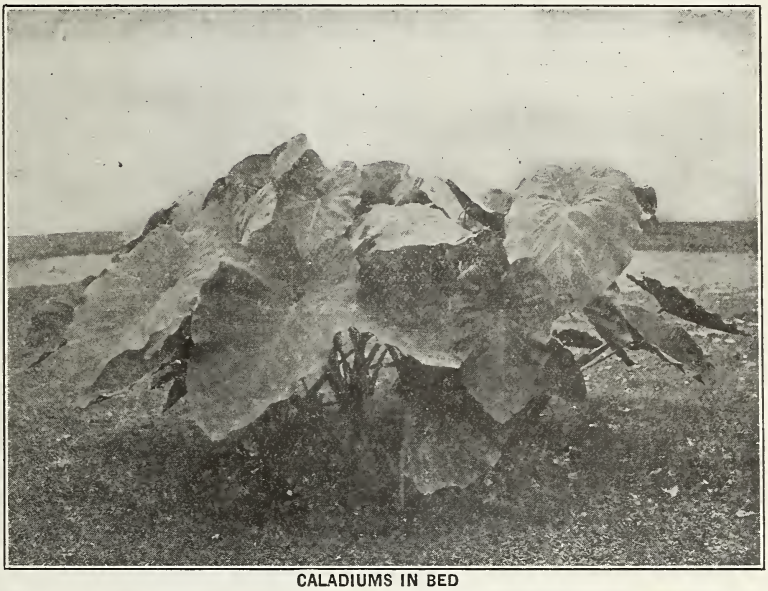
If to be sent by mail, add 3c each extra.

Large bulbs producing brilliant colored lily-like flowers. Has long, slender, succulent leaves; usually grown in pots; height about 15 inches.

Formosissima—Large, velvety, crimson flowers. Free flowering. Each, **15c**; dozen, **$1.50.**

Johnsonii—Brilliant scarlet striped with white. Very large flowers. Each, **25c**; dozen, **$2.50.**

Belladonna Major—White turning to rose as the flower ages. Each, **15c**; dozen, **$1.50.**



CALADIUMS IN BED

Tuberous-Rooted Begonias.

These bloom thoughout the summer and require very little care. They are of gorgeous colors, profuse flowering and range in shades from white, salmon, scarlet, crimson, etc. The varieties we offer are among the best of all classes. Tubers may be preserved through the winter by packing in charcoal dust.

SINGLE VARIETIES.

Separate Colors—Scarlet, pink, white, orange or yellow. Each, **10c**; dozen, **75c**; per 100, **$5.00.**

Mixed—All colors. Each, **8c**; dozen, **65c**; per 100, **$4.50.**

DOUBLE VARIETIES.

Separate Colors—White, rose, yellow, orange and scarlet. Each, **10c**; dozen, **$1.00**; per 100, **$6.50.**

Mixed—All colors. Each, **8c**; doz., **75c**; 100, **$5.00.**

CALADIUMS (Elephant's Ears.)

An vigorous growing plant which has tremendously large, pendulous leaves borne on long stiff stems. In rich soil, with an abundance of moisture, assume very large growth and is most effective either singly on lawns or planted in centers of beds or as backgrounds for other blooming plants.

Small Bulbs—Each, **10c**; dozen, **90c**; by mail, **$1.00.**

Large Bulbs—Each, **12c**; dozen, **$1.25**; by mail, **$1.50.**

Extra Large Bulbs—Each, **15c**; dozen, **$1.50**; by mail, **$2.00.**

Mammoth Bulbs—Each, **25c**; dozen, **$2.50.**

Monster Bulbs—Each, 50c; dozen, **$5.00.**

CANNAS.

The wonderful improvement to which this popular bedding plant has been developed makes it today one of the best of all summer flowering plants both for flowers and foliage. Its ornamental leaves varying from light pea green to darkest brilliant maroons and bronzes can be used most effectively both in borders or beds. The flower spikes have been developed to enormous size and individual flowers sometimes measure 2 inches across. They are of most brilliant colors including all shades from creamy white through pure lemon yellow, orange, salmon, pink, scarlet to deep red velvety maroons. Many of the flowers are tinged with gold, some spotted and others striped until there is a gorgeous display which continues in bloom from early summer until cut by frost.

For best results beds should be deeply spaded and a liberal amount of well rotted manure dug in. A mass of the different colors can be planted together or single plants are effective—the arrangement being largely dictated to by one's own taste.

Prices of Named Varieties, Dormant Roots—each, 10c; dozen, $1.00; by mail, $1.15.

ALPHONSE BOUVIER—Very large clear crimson. Height 4½ ft.

ALSACE—Creamy white flowers in large clusters. Foliage green. Height 3½ ft.

AUGUSTA—Bright crimson, edged with a broad band of yellow. Foliage green. Height 2½ ft.

AUSTRIA—Pure canary yellow, has large flowers spotted with red in the center of the petals. Height 5 to 6 ft.

BLACK PRINCE—Dark velvety crimson, very rich. Immense clusters. Foliage dark green; red stalks. Height 4½ ft.

BURBANK—Rich sulphur yellow. Immense petals dotted red. Giant orchid flowers, free blooming. Foliage green. Height 4½ ft.

CHAS. HENDERSON—Crimson scarlet with yellow throat Enormous trusses. Foliage green. Height 3½ ft.

EGANDALE—Deep currant red. Foliage rich bronze red. Splendid bedder. Height 3½ ft.

FLORENCE VAUGHAN—Yellow with bright red spots. Foliage green. Height 3½ ft.

ITALIA—Bright orange scarlet with broad golden yellow throat. Enormous flowers borne on long, massive stems well above the green foliage. Height 4 ft.

KING HUMBERT—An enormous orange scarlet variety with bright red markings. Flowers measure 6 inches in diameter; very free blooming; foliage rich, coppery bronze, broad leaves. Height 5 ft. One of the finest show sorts.

LOUISIANA—Orchid flowered, velvety scarlet. Flowers very large, sometimes 6 inches across. Foliage bright green edged with narrow purple band. Height 6 ft.

MADAM CROZY—Vermillion with golden borders. Green foliage. Height 3½ ft.

QUEEN CHARLOTTE—Rich orange scarlet with broad gilt edge. Green foliage. Height 4 ft.

SHENANDOAH—Showy large rose pink. Green foliage. Height 4 to 5 ft.

MIXED DWARF SORTS—Per doz., **75c**; per 100, **$5.50.**

MIXED TALL SORTS—Per doz., **75c**; per 100, **$5.50.**

DAHLIAS.

One of the most satisfactory of the summer flowering roots, producing an abundance of brilliant colored flowers from July to frost. The different varieties comprise all colors from purest white to deepest maroon. Many of them in two or more colors with edged petals; some double with quilled petals, others broad, flat petals, some twisted and curled, and comprise many fantastic shapes. There are several classes. Our stock embraces the best varieties and prices are very reasonable.

Culture—Plant from April to July. Do not allow over three plants to grow. Stake the plants. By keeping the suckers pulled off will produce the finest blooms. After frost dig and store in a dry place where they will not freeze.

Our stock is CHOICE FIELD GROWN Roots, strong division.

PRICE ALL VARIETIES in customers assortment, separate varieties as desired. Each, 12c; $1.25 per doz.; $8.00 per 100. BY MAIL, 15c each; $1.40 per doz.

ASSORTED COLORS—Our selection, 10c each; $1.00 per doz.; $7.50 per 100. BY MAIL, 12c each; $1.15 per doz.

SHOW OR FANCY DAHLIA

CACTUS DAHLIAS.

These are very beautiful having long twisted petals and embrace nearly all shades and colors. They have been very much improved both in form of flower and shadings and blendings.

Blanche Keith—Bright yellow, large flower, very free.

Countess of Lonsdale—A pleasing blend of salmon, pink and amber, the freest of all the Cactus Dahlias.

Dainty—Center lemon yellow, delicate rose pink at tips.

Elsie—Buttercup yellow, shading to amber and deep rose, very fine.

Flora—The ideal florist's white.

Gen. Buller—Rich velvety maroon, tipped white, very free.

Kriemhilda—Brilliant pink, shading to white center, fine for floral work.

Oriole—Bright salmon red, twisted petals.

Prince of Yellows—Canary yellow; best yellow Cactus for cutting.

Standard Bearer—Rich firy red; best scarlet for cutting.

DECORATIVE DAHLIAS.

These produce large flowers and have flat petals being intermediate between the Cactus and Show Types. They are fine for cut flowers being of good substance.

Black Beauty—A rich velvety maroon.

Catherine Duer—Iridescent red, a glowing crimson under artificial light.

Henry Patrick—Large pure white, a splendid cut flower variety.

Jack Rose—Brilliant crimson, very fine.

Lyndhurst H.—Best commercial scarlet for cutting.

Maid of Kent—Bright cherry red, white at tips.

Nymphea—Silver pink, fine for cutting.

Sylvia—Flesh pink, changing to white at center, The best and most useful Dahlia for florists.

Souv. Gus de Douzon—Bright orange red, immense flowers, very free.

Yellow Duke—Clear canary yellow, very large, the best in its color for cutting.

SHOW AND FANCY DAHLIAS.

Usually ball shaped with quilled petals. They are mostly solid colors, but some sorts are beautifully shaded or colored at the tips; others in the center.

Arabella—Primrose tipped rose and lavender.

A. D. Livoni—Sea shell pink, old favorite, best in its color.

Cuban Giant—Glowing crimson, very large flower.

Cameliaflora—Snow white, very free, a good florist's white.

Chas. Lanier—Yellow amber, shaded buff.

Emilie—Rosy lavender, white at base of petals, excellent for cutting.

Frank Smith—Velvety maroon, white at tips, very free and early.

John Thorpe—Delicate pink, very large flower.

King Carlos—Purple, tipped white.

Mary D. Hallock—Pure yellow, free flowering.

Madge Wildfire—Bright orange red.

Mrs. Gladstone—Soft rose pink, very free.

Mme. Alfred Moreau—A rich deep rose pink, very free flowering.

Queen Victoria—Canary yellow, very free.

Red Hussar—Intense scarlet crimson.

Striped Banner or American Flag—Cardinal red, striped white, very showy.

Snow—The purest white, very free.

White Swan—Pure white, popular cut flower kind Very free.

Wm. Pierce—Delicate shell pink.

Zebra—Pearl white, tipped and edged deep pink.

PEONY FLOWERED DAHLIAS.

These have irregularly curved and twisted petals quite beautiful and odd. Many of them are fragrant.

King Leopold—Rich lemon yellow. Freest bloomer of its class.

Gloire de Baarn—Delicate flesh pink; fragrant.

Geisha—The most showy of its class. A rich combination of scarlet and gold.

Queen Emma—Distinct soft rose. Fragrant.

Priscilla—Scarlet.

Princess Juliana—Pure white.

POMPON DAHLIAS.

Small flowers which are most excellent for bouquet or decoration. Very free blooming.

Alewine—Flesh, edged lavender pink.

Catherine—Pure yellow, very free, continuous bloomer, fine cut flower, early.

Mars—Bright scarlet, early continuous bloomer.

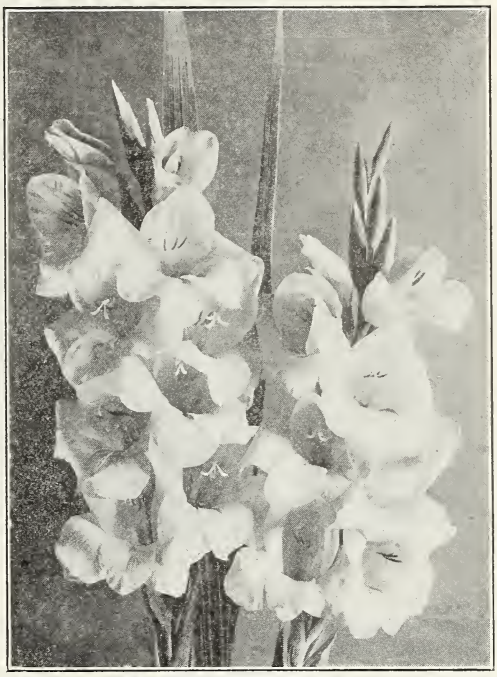
Rosalie—Yellow, edged crimson.

Snowclad—Pearl white, fine for cutting.

GLADIOLUS.

A very desirable summer flowering bulb, producing gorgeous and brilliant lily-like tubular flowers on long spikes. They grow to a fair height from 3 to 4 feet and comprise a brilliant display of shades and colors, varying from purest white through pink, striped, yellow, orange, scarlet, crimson, etc.

Bulbs can be planted from the middle of April to July and should be set about 3 inches deep and 8 to 10 inches apart, according to the effect to be produced. Can be planted in succession for different blooming periods.



AMERICA GLADIOLUS

NAMED VARIETIES.

These comprise some of the choicest sorts. Note our very low prices.

If by mail add 5c per dozen for postage.

America—A beautiful soft pink lavender, shading to to very light, almost white. A most charming and attractive sort. **3c** each; **30c** doz.; **$2.00** per 100.

Augusta—A fine sort with large spikes. Pure white shaded with blue. **5c** each; **35c** doz.; **$2.50** per 100.

Halley—A delicate salmon pink with roseate tinge. The lower petals have a creamy blotch with a stripe of bright red through the center. The best of all salmon pinks. **5c** each; **35c** doz.; **$2.50** per 100.

Hollandia—Yellowish rose. Very large spike, extra fine for cutting. **5c** each; **35c** doz.; **$2.50** per 100.

Lily Lehman—Pure white shaded delicate rose. Very large spike. **8c** each; **80c** doz.; **$6.00** per 100.

Mrs. Florence King—Brilliant vermillion scarlet borne on long spikes. Flowers enormous, sometimes 4½ inches across. Most excellent. **5c** each; **30c** doz.; **$2.25** per 100.

Pink Beauty—Brilliant dark pink with red blotches. Very early. **5c** each; **30c** doz.; **$2.00** per 100.

Princeps—Immense rich crimson scarlet, blotched on the lower petals. **5c** each; **35c** doz.; **$2.50** per 100.

Brenchleyensis—Deep vermillion scarlet; most showy. **5c** each; **35c** doz.; **$1.50** per 100.

White Giants—A beautiful white variety of magnificent form and size. **6c** each; **60c** doz.; **$4.50** per 100.

SEPARATE COLORS.

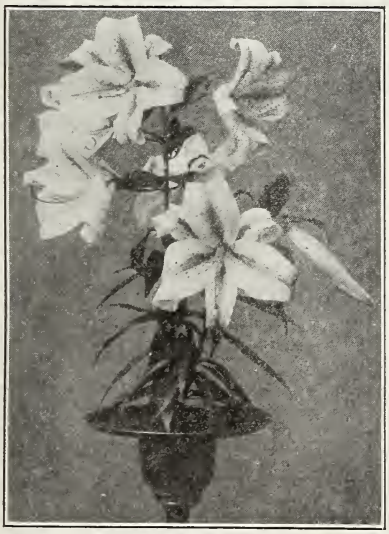
Scarlet and Crimson. **3c** each; **25c** doz.; **$1.50** per 100.
White and Light. **3c** each; **30c** doz.; **$2.00** per 100.
Pink Shades—**3c** each; **30c** doz.; **$2.00** per 100.
Striped and Variegated—**3c** each; **30c** doz.; **$2.00** 100.
Yellow and Orange—**5c** each; **40c** doz.; **$2.50** per 100.

MIXED GLADIOLUS.

J. C. McC. Superb Mixture—Largest size bulbs. Brilliant colors and shades. **5c** each; **25c** doz.; **$1.75** 100.

Lemoines' Mixed—Brilliant colors. Exceedingly valuable for massing. **5c** each; **25c** doz.; **$1.50** per 100.

Good Mixed—**2c** each; **20c** doz.; **$1.25** per 100.



LILIUM AURATUM

MADEIRA VINES (Mexican Potato)

A rapid growing vine with bright, smooth leaves which produce intense shade and valuable for covering fences, out-buildings, or screening porches. Plant the roots 2 inches deep. Vines should be trailed on strings or poles. Strong roots **5c** each; 3 for **10c**; **30c** doz.; **$2.00** per 100.

LILIES.

Set the bulbs 6 inches deep. If the ground is very heavy, a handful of sand at the bottom of the hole will act for drainage.

AURATUM (Gold-Banded Lily)—A magnificent sort producing large broad creamy white flowers spotted with maroon and having a broad band of gold extending the length of each petal. Large size bulbs **25c** each; **$2.50** doz. Medium size **15c** each; **$1.50** doz.

SPECIOSUM RUBRUM—A magnificent sort. Color blush white with dark maroon spots. Very effective and handsome. Each **20c.**, doz. **$2.00.**

SPECIOSIUM ROSEUM—Somewhat lighter shade than above and very similar. Each **20c,** doz. **$2.00.**

Postage on above 3c each extra.

TIGRINUM (Tiger Lily)—Large salmon red flowers, which have black spots. **Single Tiger Lily, 10c** each, **$1.00** doz. **Double, 15c** each, **$1.50** doz.

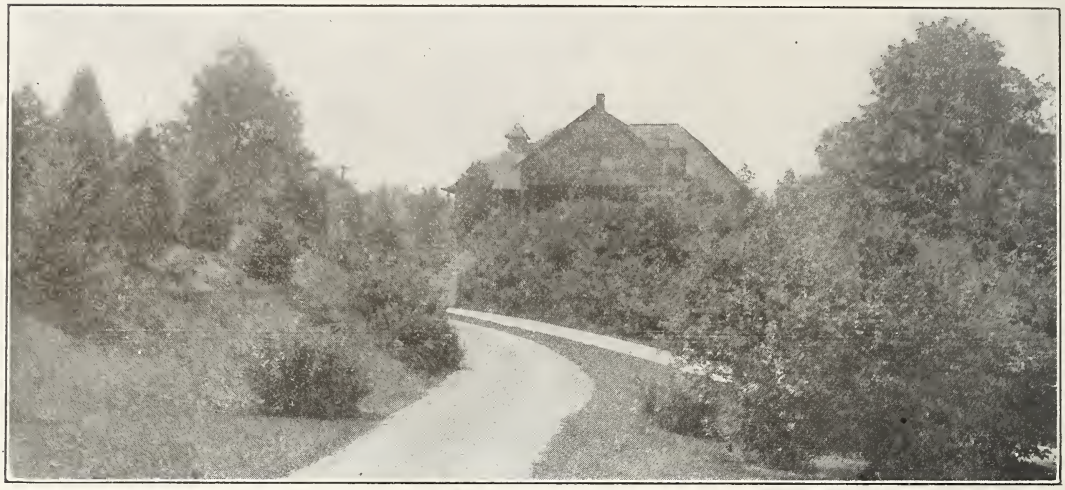
TUBEROSES.

Well known summer flower, having a very sweet scent. Bulbs may be planted outside from April to June.

EXCELSIOR DWARF PEARL—The best of all double Tuberoses, producing very large finely formed flowers.

First size bulbs, 5c each; **30c** doz.; **$1.75** per 100.
Second size bulbs, 20c doz.; **$1.25** per 100.

NURSERY DEPARTMENT.



This, like other departments of our business, is conducted with scrupulous care. We endeavor to supply all customers with stock that is absolutely true to name and strictly choice quality. All stock is disinfected to eliminate San Jose Scale and other insect as well as Fungus diseases. All are carefully packed with moss for protection of roots and every care used that it shall arrive at destination in good order.

Naturally as the season advances, many of the choicest specimens become exhausted, hence we advise early orders, then it gives our Nursery time to pack and get the stock in order for shipping, so that when the proper time comes for planting, it will be forwarded to customers.

Owing to the many exigencies and often unfavorable conditions, we cannot guarantee to replace stock if it dies, but if there is any reason for complaint on arrival of the stock, we will cheerfully make good to the best of our liability.

Our prices are made very reasonable. To large buyers, however, we will take pleasure in estimating on lists that may be submitted us and believe we shall be able to do as well (or better), quality considered, as any other firm.

To those desiring to beautify lawns, grounds, etc., and are not altogether familiar with height, habits of growth, and general information on growing, etc., we will take pleasure, on request, in mailing our book on "What, Where, When and How to Plant." It is comprehensive and contains much valuable information. MAILED FREE ON REQUEST.

Deciduous Shade and Ornamental Trees.

FOR LAWN, STREET AND FOREST PLANTING.

Strictly selected, all first quality. Ask for special prices in large quantities.
When Caliper is stated (in inches) it is taken 1 foot from the ground line.

		Each	Per 10
AILANTHUS, (Tree of Heaven)	8 to 10 ft.	$1.00	$8.00
ALDER, (Alnus) European	8 to 10 "	1.00	8.00
" Imperial Cut Leaved	8 to 10 "	1.75	15.00
ASH, American White	8 to 10 "	.75	6.00
" " "	10 to 12 "	1.00	8.00
" " Green	8 to 10 "	.75	6.00
" " "	10 to 12 "	1.00	8.00
" European	10 to 12 "	1.00	8.00
" Mountain European	8 to 10 "	1.00	8.00
BEECH, American	3 to 4 "	1.00	8.00
" European	4 to 6 "	1.00	8.00
" Purple Leaved	3 to 4 "	1.25	10.00
BIRCH, European White	8 to 10 "	1.25	10.00
" American White	8 to 10 "	1.25	10.00
" Purple Leaved	4 to 6 "	1.25	10.00
BIRD CHERRY, (Prunus Padus)	6 to 8 "	.75	6.00
BOX ELDER, (See Maple Ash-Leaved).			
BUCKEYE, Ohio	4 to 6 "	1.25	10.00
CATALPA, Speciosa	8 to 10 "	.75	5.00
" "	10 to 12 "	.80	6.00
" Bungei, grafted 1 yr.	6 to 8 "	1.00	8.00
" " " 2 "	6 to 8 "	1.25	10.00
CHERRY, Japan Flowering	4 to 6 "	1.25	10.00
" Double "	4 to 6 "	1.00	8.00
CRAB APPLE, Bechtel's double Fl'g.	4 to 5 "	1.00	8.00
" Parkmanni	3 to 4 "	1.00	8.00
CYPRESS, Deciduous	6 to 8 "	1.25	10.00
EMPRESS TREE (Paulownia Imperialis)	4 to 6 "	1.25	10.00
EUONYMUS—See Strawberry Tree.			
ELM, American	8 to 10 "	.75	6.00
" "	10 to 12 "	1.00	8.00
ELM, English	6 to 8 "	1.00	8.00
" "	8 to 10 "	1.25	10.00
" Scotch	6 to 8 "	.75	6.00
" "	8 to 10 "	1.00	8.00
HACKBERRY	8 to 10 "	1.00	8.50
HORSE CHESTNUT, White Fl'g	6 to 8 "	1.00	8.50
" " Red "	4 to 5 "	1.25	10.00
" " Double White	6 to 8 "	1.50	12.50
" " Dwarf	2 to 3 "	1.00	8.00
KENTUCKY COFFEE TREE	6 to 8 "	.80	6.50
" " "	8 to 10 "	1.00	8.50
LABURNUM, Scotch	5 to 6 "	1.00	8.00
LARCH, European	4 to 6 "	1.00	8.00
LINDEN, American	6 to 8 "	1.00	8.00
" "	10 to 12 "	1.25	10.00
" European Broadleaf	8 to 10 "	1.00	8.00
" " "	10 to 12 "	1.25	10.00
" Silver or White Leaf	6 to 8 "	1.25	10.00
LIQUIDAMBER—See Sweet Gum.			
MAIDEN HAIR TREE (Salisburia)—Rapid growth, beautiful fern-like foliage resembling maiden hair fern. Rare and elegant	6 to 8 ft.	$1.00	$8.00
MAPLE, Ash-leaved (Box Elder)	10 to 12 "	.85	7.00
" Cork Bark	6 to 8 "	1.25	10.00
" Norway	8 to 10 "	1.00	8.00
" Scarlet	6 to 8 "	1.25	10.00
" Schwedlerii	8 to 10 "	1.50	12.50
" Silver	10 to 12 "	1.00	8.00
" Sugar or Rock	8 to 10 "	1.00	8.00
" Sycamore	8 to 10 "	1.00	8.00
" "	10 to 12 "	1.50	13.00
" Weir's Cut-leaved	10 to 12 "	1.50	13.00
MOUNTAIN ASH—See **ASH, Mountain.**			

Deciduous Shade and Ornamental Trees—Cont'd.

		Each	Per 10
OAK, Burr	8 to 10 "	2.00	17.00
" English	2 to 2½ in. diameter	3.00	25.00
" Pin	10 to 12 ft.	1.75	16.00
" Red	8 to 10 "	1.80	16.00
" Scarlet	8 to 10 "	1.80	16.00
" White	8 to 10 "	1.80	16.00
OLIVE, Russian	8 to 10 "	1.00	8.00
PAULOWNIA—See Empress Tree.			
PEACH, Flowering Red and White	4 to 5 "	.60	4.00
PERSIMMON, American	4 to 6 "	.75	6.00
POPLAR, Carolina	10 to 12 "	.60	4.50
" "	1¾ to 2 in. diameter	1.00	8.50
" Lombardy	10 to 12 ft.	1.00	8.00
" Balsam (Balm of Gilead)	10 to 12 "	.75	6.00
" "	2 to 2½ in. diam.	1.50	12.05
STRAWBERRY TREE, (Euonymous, European)	5 to 6 ft.	.60	4.50
SWEET GUM (Liquidamber)	4 to 6 "	1.00	8.00
SYCAMORE, American	10 to 12 "	1.00	8.50
" European	8 to 10 "	1.00	8.00
THORN, (Crataegus) Paul's Scarlet	4 to 5 "	.75	6.00
" Double White and Pink	4 to 5 "	.75	6.00
TULIP TREE	6 to 8 "	1.00	8.50
"	10 to 12 "	1.50	12.50
WILLOW, Royal	8 to 10 "	1.00	8.00
" Golden Bark	8 to 10 "	.75	6.00
" Laurel-Leaved	8 to 10 "	.75	6.00

See also Weeping Trees.

Weeping Deciduous Trees.

		Each	Ten
ASH, WEEPING (Fraxinus Pendula)	1 yr.	$1.00	$ 8.00
BIRCH, Cut-leaved,	6 to 8 ft.	1.00	8.00
CHERRY, Japan, 2 yr. head		1.75	15.00
ELM, Camperdown 2 yr. head		1.25	10.00
MOUNTAIN ASH, 2 yr. head		1.00	8.00
MULBERRY, Weeping, Russian	6 " 8 ft.	1.00	7.50
WILLOW, Babylonica	10 " 12 "	1.00	8.00
WILLOW, Thurlow	10 " 12 "	1.00	8.00

Nut Bearing Trees.

		Each	Per 10
BUTTERNUT	4 to 6 ft.	.50	4.00
CHESTNUT, American Sweet	6 " 8 "	.80	7.00
" Japan or Giant	2 " 3 "	.80	7.00
" Spanish	3 " 4 "	.50	4.00
FILBERT, English	3 " 4 "	.50	4.00
HICKORY, Shellbark	4 " 5 "	1.50	12.50
PECAN	2 " 3 "	.75	6.00
WALNUT, English	1½ " 2 "	.40	3.00
" Black	6 " 8 "	.75	6.00
" Japan	6 " 8 "	.75	6.50

EVERGREENS. Coniferae.

Cone bearing evergreens are especially ornamental for large grounds, and the dwarf varieties desirable for massing even in small plots. They are particularly attractive for Winter landscapes when deciduous trees are divested of their foliage. If carefully handled, evergreens transplant as successfully as any other tree, and those we offer are all balled and wrapped with burlap. April is regarded by nurserymen generally as the best month for transplanting evergreens, though quite large numbers are put out in the fall.

Heights are indicated by the letters (**A**), (**B**), (**C**) and (**D**) as follows:—
(**A**) denotes trees which attain the largest size, 50 ft., and upward.
(**B**) " " " " secondary size, 20 to 40 ft.
(**C**) " " " " mediu n size, 9 to 15 ft.
(**D**) " " " " small size 1 to 8 ft.

JUNIPER VIRGINIANA

ARBOR VITAE. Thuja.

Well known evergreens having mostly with flat branches and of various shades. Some sorts are particularly desirable for hedges.

American (**B**)—A beautiful native sort, commonly known as White Cedar. Grows very symmetrically and is excellent as a single plant or for massing, and largely used as hedge plants or for screens. 1½ to 2 ft., each, **50c;** 10 for **$4.00;** 100, **$30.00.** 2 to 3 ft., each, **60c;** 10 for **$5.00;** 100, **$40.00.** 3 to 4 ft., each, **90c;** 10 for **$7.50.** 4 to 5 ft., each, **$1.25;** 10 for **$10.00.**

Compacta (**D**)—A dwarf compact sort. 1½ to 2 ft. each, **75c;** 10 for **$6.00;** 2 to 3 ft., each, **90c;** 10 for **$7.50.**

Douglas' Golden (**D**)—Golden foliage. Fine. 3 to 4 ft., each, **$3.00.** 10 for **$25.00.**

Pyramidal (**C**)—Of upright compact hibit like the Irish Juniper, very desirable for tubs. 1½ to 2 ft., each, **75c;** 10 for **$6.00;** 2 to 3 ft., each, **$1.00;** 10 for **$8.00;** 100, **$60.00;** 3 to 4 ft., each, **$2.00;** 10 for **$17.50.**

Siberian (**C**)—The best of all sorts for this country. It is exceedingly hardy, keeping its color well in winter. Of compact growth, pyramidal, makes an elegant lawn tree of great value for ornament or for screening, hedges and tubs. 1½ to 2 ft., each, **75c;** 10 for **$6.00.** 2 to 3 ft., each, **$1.00;** 10 for **$8.00;** 100, **$60.00.** 3 to 4 ft., each, **$2.00;** 10 for **$16.00.**

CYPRESS. Retinospora.

Rare and choice evergreens of graceful habit and beautiful foliage.

Golden Thread-Branched (**Filifera Aurea**)—A golden-branched variety having fine cut leaves and of weeping habit, 15 to 18 inches, each, **$1.25.**

Obtusa—Beautiful fern-like branches, more or less weeping. Foliage bright green. 15 to 18 inches. Each **$1.50.**

CYPRESS—Cont'd.

Plumosa—A beautiful evergreen with finely cut foliage, which is very bright fresh green. 2 to 3 ft., each, **$1.75.**

FIR. Abies.

Balsam (**B**)—Very erect, regular pyramid-shaped tree with dark green sombre foliage. It grows rapidly and is very hardy. 2 to 3 ft., each, **50c;** 10 for **$4.00.** 3 to 4 ft., each., **$1.00;** 10 for **$8.00.**

Silver, (Colorado), (Concolor). (**B**)—Without doubt one of the finest evergreens. Graceful habit, broad, handsome foliage, bluish above, silvery beneath. A grand tree. 1½ to 2 ft., each, **$2.00;** 10 for **$17.50.**

Nordmanniana (**Nordmann's**) (**B**)—This majestic tree is of symmetrical form, vigorous and quite hardy. Its foliage is massive, dark green, shining above and slightly velvety below, rendering it a very handsome tree throughout the year. 1½ to 2 ft., each, **$2.00.** 10 for **$17.50.** 2 to 3 ft., each, **$3.00.** 10 for **$25.00.**

HEMLOCK. Tsuga. (A).

A beautiful and remarkably graceful native tree, with drooping branches, and delicate dark foliage, like that of the Yew. It is a handsome lawn tree, distinct from all others and makes a highly ornamental hedge, 2 to 3 ft., each, **$1.50;** 10 for **$12.50.** 3 to 4 ft., each. **$2.00;** 10 for **$15.00.**

Evergreens—CONT'D.

JUNIPER. Juniperus.

Irish (C)—A distinct and beautiful variety, of erect dense, conical outline, resembling a pillar of green; very desirable singly, as a hedge, or for massing. 2 to 3 ft., each, **75c**; 10 for **$6.00.**

Virginiana (**Red Cedar**) (B)—A well known American tree, varies much in habit and color of foliage, some being quite stiff, regular and conical; others loose and irregular. It makes a fine ornamental hedge plant. 2 to 3 ft., each, **$1.00**; 10 for **$8.50.**

Savin (**Sabina**) (D)—A dwarf spreading shrub with trailing branches, thrives in the poorest soils. Very suitable for rockwork. 15 to 18 inches, each **$1.50**

PINE. Pinus.

Austrian (A)—A remarkably robust, hardy variety with long leaves, stiff and dark green. It is one of the most valuable sorts, growing rapidly, and of spreading habit. 2 to 3 ft., each, **$1.00**; 10 for **$8.50.**

Mugho (D)—A small pine of upright growth. Its general form is that of a pine bush. 12 to 15 in., each, **$1.00.** 10 for **$8.50.**

Scotch (**Sylvestris**) (A)—A fine, robust, rapid growing tree, with stout erect shoots and silvery green foliage. Very hardy, and valuable for shelter. 3 to 4 ft., each, **$1.00**; 10 for **$8.50.**

SPRUCE. Picea.

Erect growing trees, leaves needle shaped, scattered around the shoots.

Colorado Blue (**Pungens Glauca**) (B)—One of the hardiest and most beautiful of all Spruces; similar in form and habit to the white Spruce, but the foliage is of rich blue or sage color. 1½ to 2 ft., each, **$1.75.**

Koster's Blue (B)—Similar to the preceding, except the foliage is much brighter blue; very rare. 1½ to 2 ft., each, **$3.00**; 2 to 2½ ft., each, **$5.00.** 2½ to 3 ft., each, **$6.00.**

Douglas' (C)—Large, conical form; with spreading branches, horizontal; leaves light green above, glaucous below. A valuable evergreen tree. 2 to 3 ft., each, **$1.50.**

SPRUCE—Cont'd.

NORWAY SPRUCE

Norway (**Excelsa**) (A)—An elegant tree which is extremely hardy, of rapid growth, lofty, pyramidal form. Branches assume a graceful, drooping habit when the tree attains 15 to 20 feet in height. One of the most popular evergreens for planting, either as single specimen trees, or in masses, for effect or shelter. A splendid evergreen hedge plant. 2 to 3 ft., each, **60c**; 10 for **$5.00**; 100, **$35.00.** 3 to 4 ft., each, **90c**; 10 for **$6.50.**

Norway Weeping (A)—A pendulous variety, the lateral branches drooping gracefully. 2 to 3 ft., each, **$2.00.**

Norway Golden (A)—One of the most beautiful and effective of evergreens, its young shoots contrasting brilliantly with the old undropped foliage. Similar in growth and characteristics to the Norway. 3 to 4 ft., each, **25c.**

Hedge Plants.

Althaea—See page 71.

Barberry Thunbergii—For description see page 71. 1½ to 2 ft., per 100, **$14.00.**

Locust, Honey—Well known shrubs and trees with long, sharp thorns. 12 to 15 inches, per 100, **$5.00.**

Osage Orange—12 to 15 inches, per 100, **$5.00.**

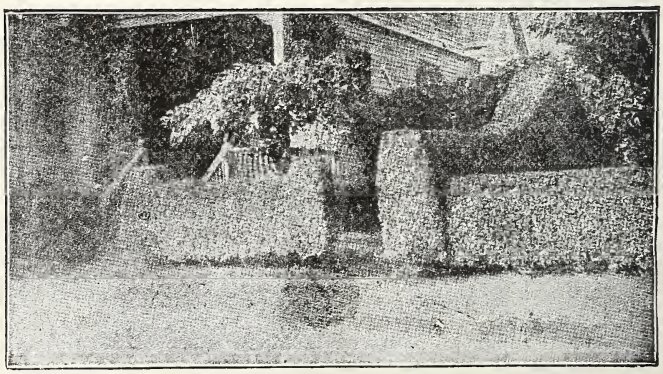
Privet.

All varieties of Privet are almost evergreen; grow freely in all soils; are compact and regular in form and bear shearing to almost any extent. They are valuable for groups in lawns. Bloom freely in June and July.

Planting—Can be set either in single rows about 12 inches apart, or in double 8 inch rows, setting the plants alternately 12 inches apart. Double rows make thicker more compact hedges.

Chinese (**Ibota**)—Flowers large, white, very fragrant, produced in profusion; leaves long and shining. One of the hardiest of the Privets and a charming and valuable shrub, prized for its fragrant flowers, as well as its handsome foliage. 1½ to 2 ft. Each, **15c**; 10 for **$1.00**; per 100, **$7.50.** 2 to 3 ft., each, **20c**; 10 for **$1.50**; per 100, **$12.00.**

CALIFORNIA—A vigorous hardy variety of fine habit and foliage. It is free growth, succeeds under adverse conditions and does fairly well under trees. The most commonly planted of all Privets. 1½ to 2 ft., each, **10c**; 10 for **75c**; per 100, **$4.00.** 2 to 2½ ft., each, **20c**; 10 for **$1.00**; per 100, **$6.00.** Extra strong plants, 10 for **$1.50**; per 100, **$10.00.**



CALIFORNIA PRIVET HEDGE

EVERGREEN HEDGE PLANTS.

ARBOR VITAE—For description, see page 69.
American—15 to 18 inches. **$14.00** per 100.
Siberian—1½ to 2 ft. **$35.00** per 100.
NORWAY SPRUCE—15 to 18 inches. **$15.00** per 100.

ORNAMENTAL FLOWERING SHRUBS.

There is nothing that will add more beauty or lend more enchantment to grounds and lawns than well selected judiciously grouped shrubs, and considering their moderate cost, they should be used more largely. Our book on **"What-Where, When and How to Plant"** gives details as to grouping and will be **mailed free on request.**

Our list embraces most all of the desirable sorts. Sizes quoted are good stock, thrifty plants, and our prices are very reasonable.

Where very large quantities are desired, we will of course take pleasure in quoting special prices on lists that may be submitted.

Specimen Plants—We can supply when desired larger plants of most of the sorts listed here, but would prefer to adhere to this list as far as possible. If, however, a considerable quantity of larger shrubs are wanted kindly let us know.

Heights—We have denoted the approximate height of most shrubs after they have attained maturity, by the letters, as follows. **A,** attains 9 to 12 ft. **B,** 5 to 8 ft. **C,** 1 to 4 ft. This will somewhat enable a selection to be made so that groups may have the larger growing varieties at the back.

ALTHEA (A). Rose of Sharon.

Among the most valuable of our hardy Shrubs on account of the late season of flowering, which is from August to October. Flowers resemble Hollyhocks, being borne on stiff up-right stems and are very desirable to use as hedge plants in some locations.

Double white, purple, pink or red—Height 2 to 3½ ft., each, **30c;** 10 for **$2.50.**

Single white, pink, red and purple—2 to 3 ft., each **30c;** 10 for **$2.50.**

ARALIA—Angelica Tree.

Pentaphylla (B)—A pretty Japanese Shrub of medium size and rapid growth. The leaves are pale green, branches are furnished with spines. 2 to 3 ft., each, **35c;** 10 for **$2.50.**

AZALEA, Mollis (C).

A beautiful variety from Japan, having large flowers of various shades of yellow, orange, carmine, etc., leaves partially shaded. 12 to 15 inches, each **75c;** 10 for **$6.00.**

BARBERRY, Berberis.

Hardy shrubs with thorny bushes, which grow well and thrive well in almost any soil. They are a most interesting family of shrubs, varying in size from 2 to 6 ft. high. Rich in variety of leaves, flowers and habit. Very showy orange and yellow flowers in May or June, which are succeeded by bright various colored small fruits which are very ornamental in autumn and winter.

Thunbergii (B) Japanese—One of the most beautiful Shrubs offered for hedging or for general purposes. It is neat, compact growth, small foliage, bright green changing to a beautiful coppery red in autumn. 1½ to 2 ft., each, **25c;** 10 for **$2.00;** per100, **$15.00.** 2 to 2½ ft., each, **40c;** 10 for **$3.00;** per 100, **$20.00.**

Purple Leaved (B)—Especially remarkable for its purple foliage and fruit. When fully grown attains a height of 4 to 5 feet but can be kept any height by shearing. Very effective in groups and masses, or planted by itself. 2 to 3 ft., each, **25c;** 10 for **$2.00;** per 100, **$15.00.**

Vulgaris (B)—Common or European. A handsome variety with yellow flowers in terminal drooping racemes. Bloom in May or June, followed with orange scarlet fruit which is extremely ornamental during autumn and winter. 2 to 3 ft., each, **25c;** 10 for **$2.00;** per 100, **$15.00.**

CALYCANTHUS (A) Floridus.
(Sweet Scented Shrub or Carolina Allspice.)

One of the most desirable of shrubs, bearing sweet scented flowers of a chocolate color. They bloom in June and at intervals thereafter. The wood is also fragrant. Height 2 to 3 ft., each, **35c;** 10 for **$2.50.**

CARAGANA. Siberian Pea Tree (A).

A large shrub with compound leaves consisting of from 8 to 12 bright green leaflets. Bears pea-shaped yellow flowers in May. Grow 10 to 12 ft. high. 2 to 3 ft., each **35c;** 10 for **$2.50;** per 100, **$15.00.**

CEPHALANTHUS. Button Bush (B).

A hardy, vigorous shrub with large, glossy foliage and attractive white flowers in July. 2 to 3 ft., each, **35c;** 10 for **$2.75.**

CLETHRA. Alnifolia. Sweet Pepper Bush (A).

Spikes of clear white fragrant flowers in August. Leaves dark green and lustrous, fading to yellow tones. A grand flowering shrub for moist or loamy soil. 1½ to 2 ft., each, **35c;** 10 for **$2.75.**

CURRANT. Ribes (B).

Gay and beautiful shrubs in early spring and of easiest culture.

Yellow Flowered (Aureum)—A native shrub with shiny leaves and yellow sweet scented flowers in June. 2 to 3 ft., each, **30c;** 10 for **$2.50.**

Crimson Flowered (Sanguineum)—Deep red flowers produced in great abundance in early spring. 1½ to 2 ft., each, **35c;** 10 for **$2.75.**

ORNAMENTAL FLOWERING SHRUBS—Cont'd.

DEUTZIA.

A beautiful class of small and large flowering plants which have luxuriant foliage, very hardy and covered with a profusion of attractive white and pinkish flowers, usually blooming the latter part of June.

Double Flowered (Crenata fl. pl.) (B)—One of the most desirable flowering shrubs in cultivation. We can supply either double white tinged with rose, or pure double white. 2 to 3 ft., each, **30c;** 10 for **$2.50;** per 100, **$15.00.**

Gracilis. (Slender Branched). (C)—A charming species of dwarf habit. Flowers pure white about the middle of June. 15 to 18 inches, each, **25c;** 10 for **$2.00.**

Lemoineii (B)—Flowers pure white borne on stout branches, which are of up-right growth. It is of dwarf habit and very free flowering. 1½ to 2 ft., each, **30c;** 10 for **$2.50.**

Pride of Rochester (B)—A beautiful sort with large double white flowers, the back of the petals being slightly tinged with rose. It excels all older sorts in size of flowers, length of panicle, profuseness of flowers and vigorous habit. Early blooming. 2 to 3 ft., each, **25c;** 10 for **$2.00;** per 100, **$15.00.**

DOGWOOD. Cornus. (A)

Red Flowering—A variety producing flowers suffused with bright red. Blooms when quite young. One of the finest flowering trees. 2 to 3 ft., each, **$1.25.** 10 for **$10.00.**

ELDER, Sambucus (A).

Showy rapid growing large shrubs, quite ornamental in flowers, fruit and foliage. They bloom in June.

Golden (A)—A handsome sort with golden yellow foliage, valuable for contrast with darker greens, enlivening the appearance. 2 to 3 ft., each, **30c;** 10 for **$2.50.**

Cut-Leaved (A)—A splendid sort with deeply and delicately cut dark green foliage. This is one of the best cut leaved shrubs in cultivation. 3 to 4 ft., each, **35c;** 10 for **$2.75.**

EUONYMOUS. Strawberry Tree.

A class of very highly ornamental shrubs or trees which are beauftiful in autumn when covered with showy fruit.

Atropurpureus (Burning Bush) (A)—A tall growing shrub with large leaves which turn scarlet in the autumn. Fruit large dark red. 1½ to 2 ft., each, **35c;** 10 for **$3.00.**

EXOCHORDA Grandiflora. Pearl Bush (A)

A fine shrub producing large white flowers in May. One of the finest of all at its season. 2 to 3 ft., each, **30c;** 10 for **$2.50.**

FORSYTHIA. Golden Bell (B)

A beautiful shrub of moderate size which is literally covered with pendulous bright golden yellow bell-shaped flowers very early in spring before the leaves.

Fortuneii—Of up-right growth, deep green foliage, flowers bright yellow. 2 to 3 ft., each, **25c;** 10 for **$2.00.**

Suspensa (Weeping Forsythia)—Similar to Fortuneii, excepting that the plant is drooping in growth. 2 to 3 ft., each, **30c;** 10 for **$2.50.**

FRINGE.

Purple or Smoke Tree (Rhus Cotinus) (A)—An attractive shrub having very curious blooms, which, when covered with dew, resembles a cloud of smoke or mist. 1½ to 2 ft., each. **30c;** 10 for **$2.50.** 2 to 3 ft., each, **40c;** 10 for **$3.50.**

White Flowering (Chionanthus) (A)—A small native tree or shrub of roundish form, with large, glossy leaves and drooping racemes of pure white flowers, having narrow, fringe-like petals. A superb lawn tree. Blooms in May or June. 2 to 3 ft., each, **40c;** 10 for **$3.00.**

HALESIA. Snowdrop or Silver Bell. (A).

Tetraptera—A beautiful large shrub with beautiful white bell-shaped flowers in May. One of the most desirable shrubs. 2 to 3 ft., each, **40c;** 10 for **$3.00.**

HONEYSUCKLE, Upright. (B) Lonicera.

Valuable for handsome flowers and showy fruits. The following varieties are erect, upright growth. The climbing sorts will be found under the head of Climbing Plants.

Alberti—Violet bell-shaped flowers; leaves narrow; a very hardy sort, somewhat creeping. 15 to 18 in., each, **35c;** 10 for **$2.50.**

Bella Albida—White flowers, showing red fruits in great abundance. 2 to 3 ft., each, **35c;** 10 for **$2.50.**

Morowii—A fine variety from Japan, valuable for its handsome fruit. 2 to 3 ft., each, **35c;** 10 for **$2.50.**

Red Tartarian—Pink flowers which contrast beautifully with the foliage. 2 to 3 ft., each, **35c;** 10 for **$2.50.**

White Tartarian—Forms a high bush of creamy white fragrant flowers in May and June. 2 to 3 ft., each, **35c;** 10 for **$2.50.**

HYDRANGEA.

Aborescens Grandiflora (B)—Alaso called "Snowball Hydrangea and Hills of Snow." A new variety, the blooms are very largest size of pure snow-white color.It comes in bloom just after the passing of the early spring shrubs and extends over a long season from early June through August. A perfectly hardy and very superior sort. 2 to 3 ft., each, **40c;** 10 for **$3.50.**

Paniculata Grandiflora (A)—A large white flowered variety which bears in many pyramidal panicles its immense clusters of blooms. It is well known; makes a fine show; grows from 8 to 10 feet. Blooms in August and September when very few shrubs are in bloom. 2 to 3 ft., each, **35c;** 10 for **$2.50.** In tree form, 3 to 4 ft., each, **60c;** 10 for **$5.00.**

LILAC. Syringa (A).

Well known and beautiful shrubs which are indispensable both as ornamental plants and for cutting. Most of them have a delicious fragrance.

Japanese—These bloom a month later than other Lilacs. Have dark green foliage, very glossy; flowers creamy white, odorless and borne in immense panicles. 3 to 4 ft., each, **50c;** 10 for **$4.00.**

Hungarian—Has dark lilac flowers, blooms the first week in June. It is very distinct and valuable. 2 to 3 ft., each, **40c;** 10 for **$3.00.**

Persian—This grows from 4 to 6 ft. high, has rather small foliage and bright purple flowers. 2 to 3 ft., each, **40c;** 10 for **$3.00.**

Villosa—Large branching panicles. Flowers light purple when in bud; white when open, very fragrant. Especially valuable, as its flowers appear two weeks after those of other Lilacs. 2 to 3 ft., each, **40c;** 10 for **$3.50.**

Purple—The common variety of our gardens, which is so popular. Makes a good sized shrub and is very free flowering. 3 to 4 ft., each, **35c;** 10 for **$2.75.**

White—Similar in growth and characteristics to the Purple, excepting it has pure white blossoms. 2 to 3 ft., each, **35c;** 10 for **$2.75.**

Named Varieties—We can supply many named varieties of Lilacs besides the above sorts and will be glad to quote on any varieties. 2 to 3 ft., each, **40c;** 10 for **$3.00.**

ORNAMENTAL FLOWERING SHRUBS—Cont'd.

MOCK ORANGE—Philadelphus. Syringa.

These are invaluable shrubs of vigorous habit, very hardy, with large, handsome beautiful white flowers produced in great profusion in June. Most of the sorts (excepting those of dwarf habit) are very large sized 12 to 15 ft. high. The Dwarf varieties are very pretty compact plants and useful where small shrubs are desired.

Coronarius (Garland Syringa), (A)—Well known; has pure white flowers, highly scented. One of the first to flower. 2 to 3 ft., each, **30c**; 10 for **$2.50.** 4 to 5 ft., each, **40c**; 10 for **$3.00.**

Golden Leaved (C)—A very pretty plant of medium size with golden yellow foliage. It keeps its color all through the season and is pleasing in contrast with purple leaved shrubs. 15 to 18 inches each, **40c**; 10 for **$3.00.**

Gordonianus (A)—A vigorous grower and profuse bloomer. The flowers are slightly fragrant. Blooms very late, hence valuable on that account. 2 to 3 ft., each, **25c**; 10 for **$2.00.**

Grandiflorus (Large Flowered), (A)—Very showy, large flowers, slightly fragrant, branches somewhat straggling. 2 to 3 ft., each, **25c**; 10 for **$2.00.**

PRUNUS, Plum.

Purple Leaved (Pissardi), (A)—The finest purple-leaved small tree or shrub. The leaves when young are lustrous crimson, changing to a dark purple, and retain this beautiful tint till they drop late in fall. No other purple leaved tree or shrub retains its color like this. The flowers are small, white, single, covering the tree. 4 to 5 ft., each, **50c**; 10 for **$4.00.**

Double Flowered (Triloba), (B)—A native of China. It bears very double flowers of a delicate pink color about 1 inch in diameter, which are thickly set on long slender branches. Blooms in May. 3 to 4 ft., each, **50c**; 10 for **$4.00.**

PYRUS JAPONICA. Cydonia. Quince. (B)

As single shrubs on the lawn these are exceedingly attractive. They are also valuable for edgings or borders with groups of trees. They bloom very early in the spring, have large, brilliant scarlet flowers, which appear in great profusion, covering every branch, branchlet and twig before the leaves are developed. 2 to 3 ft., each, **35c**; 10 for **$2.75.**

RED BUD or JUDAS TREE. Cercis. (A).

Canadensis—This tree bears a profusion of delicate reddish purple flowers, with which it is covered before the foliage appears. In masses it is extremely effective, blooms very early in spring, adding gorgeous effect to the landscape. Trees are medium size, irregular, rounded form. Leaves heart shaped, pure green color, glossy surface above, and grayish green beneath. 3 to 4 ft., each, **50c**; 10 for **$4.00.**

RHUS—SUMACH.

Dwarf (Copallina), (B)—Beautiful shining green foliage, changing to rich crimson in autumn. Flowers greenish-yellow in August. 18 to 24 inches each, **40c.** 10 for **$3.00.**

Smooth-Leaved (Glabra), (A)—Very effective in autumn with its crimson seeds and foliage. 18 to 24 inches, each, **40c**; 10 for **$3.00.**

Cut-Leaved (A)—A very striking plant, of moderate size with deeply cut leaves, resembling fern leaves; dark green above and glaucous below. These leaves turn to a rich red in autumn. 12 to 18 inches, each, **50c**; 10 for **$4.00.**

SNOWBERRY (B)

White—A well known shrub with small pink flowers, and large white berries that hang on the plant through part of the winter. 2 to 3 ft. each, **35c**; 10 for **$2.50.**

Red (Red or Coral Berry)—A shrub of very pretty habit. Foliage, flowers and fruit small; fruit purple; hangs all winter. 2 to 3 ft., each, **35c**; 10 for **$2.50.**

SNOWBALL Viburnum.

Common (Sterilis), (B)—A well known and favorite shrub, of large size, which bears large globe shaped clusters of pure white sterile flowers the latter part of May. 2 to 3 ft., each, **35c**; 10 for **$2.50.**

Japan (Plicatum), (A)—A beautiful sort from North China. Of moderate growth with handsome plicated leaves and globular heads of pure white neutral flowers, early in June. Its habit is better than the Common Snowball, has much handsomer foliage, whiter flowers and more delicate. One of the most valuable of all flowering shrubs. 2 to 3 ft., each, **40c.**; 10 for **$3.00.**

SPIREA. Meadow Sweet.

Elegant low shrubs of easiest culture, their blooming extends over a period of 3 months.

Anthony Waterer (C)—A fine dwarf Spirea bearing dark crimson flowers all summer. One of the finest shrubs. 1½ to 2 ft., each, **35c**; 10 for **$2.50.**

Billardi (B)—A fine rose-colored sort, which bloom nearly all summer. 2 to 3 ft., each, **30c**; 10 for **$2.50.**

Double-Flowered (Plum-Leaved), (Bridal Wreath) (B)—A beautiful sort with large white flowers like white daisies, in May. Remains in bloom a long time. One of the best among flowering shrubs. 2 to 3 ft., each **30c**; 10 for, **$2.50.**

Thunbergii (B)—Of dwarf habit, rounded, graceful form with slender branches, somewhat drooping. Flowers are small, white, appearing early in spring. Foliage narrow and yellowish green. One of the first Spireas to bloom, and much esteemed on account of its neat, graceful habit. 2 to 3 ft., each, **35c**; 10 for **$2.50.**

Van Houttei (B)—One of the very finest of all Spireas. At the flowering season, in May or early June, the plant is covered with a mass of large, white flowers presenting a beautiful appearance. It is a beautiful ornament for the lawn at any season. Perfectly hardy, an early bloomer and one of the finest shrubs in the catalogue. 2 to 3 ft., each, **25c**; 10 for **$2.00**; per 100, **$15.00**; 3 to 4 ft., each, **40c**; 10 for **$3.00**; per 100, **$20.00.**

WEIGELA (B).

A shrub of erect habit while young but gradually spreading and drooping as they acquire age. They bear enormous clusters of trumpet-shaped flowers of all shapes and colors from pure white to red, extremely effective for borders and groups of trees and for margins.

The Variegated varieties are admirably suited for margins and contrasting with greens of other shrubs. They flower after Lilacs in June.

White Flowered (Candida)—An erect grower, of vigorous habit, becoming in time a large sized shrub. Flowers pure white, produced in great profusion in June, though the plants continue to bloom throughout the summer and even until autumn. 2 to 3 ft., each, **35c**; 10 for **$2.50.**

Eva Rathke—Flowers brilliant crimson: a beautiful, distinct, clear shade. 2 to 3 ft., each, **40c**; 10 for **$3.00.**

Variegated-Leaved—Of dwarf habit, and possessing clearly defined, variegated leaves; flowers nearly white. It stands the sun well, and is one of the best Dwarf variegated-leaved shrubs 1½ to 2 ft., each, **35c**; 10 for **$2.75.**

Named Varieties—We can supply a number of sorts. 2 to 3 ft., each, **50c**; 10 for **$4.00.**

HERBACEOUS PERENNIAL PLANTS.

These should be in all permanent grounds and are most valuable in borders and among shrubbery.

They add a wealth of bloom which cannot be attained from any other class of plants, of permanent nature. Hardy Herbaceous Perennials interspersed with hardy Annuals together with proper grouping of shrubbery, can be made most effective in beautifying and lend charm to all landscapes and grounds.

ALL VARIETIES EXCEPT WHERE NOTED, EACH 15c; 10 FOR $1.25

IF TO BE SENT BY MAIL ADD 5c EACH EXTRA TO SINGLE PRICES.

ACHILLEA. The Pearl—One of the prettiest flowering plants. Invaluable for borders. Covered with small double white flowers in July.

ANCHUSA. Italica. (Dropmore Variety)—A strong growing plant 5 to 6 ft. high, with broad foliage and large spikes of beautiful blue flowers the entire season. Each **25c.** 10 for **$2.00.**

ANEMONE. Japonica (Wind Flower)—Splendid bed or border plants growing about 2½ ft. high and bearing beautiful dainty flowers about 2½ inches across; borne in great profusion from September to November. Varieties;—**White, Red, Purple Pink, Queen Charlotte** (double pink), **Whirl-wind** (double white).

AQUILEGIA. (Columbine)—See description under Flower Seeds. Height 2 ft. 8 distinct varieties.

ASTERS. Hardy (Michaelmas Daisy)—Tall, leafy perennials, blooming in the fall when flowers are scarce. Color Blue, Lilac, Crimson, White and Mixed. Height 2 to 3 ft. 9 Named Sorts.

BAPTISIA. Australis. (Blue False Indigo)—Deep blue Lupin-like flowers in racemes; 2 to 3 ft. Blooms in June.

BLEEDING HEART. (Dielytra Spectabilis)—Beautiful dainty and curious formed rosy-crimson flowers with white and blue tinged protruding stamen; a splendid Border plant especially in partial shade. Height 1½ to 2 ft.

BOCCONIA. Cordata. (Plume Poppy)—An attractive plant growing 6 to 8 ft. high, with long spikes of white flowers in August. Well adapted for single lawn specimen or for the sub-tropical garden.

BOLTONIA. (False Chamomile) Asteroides—Large, white, flowers tinged with pink, blooming in September. Height 4 to 5 ft. **Latisquamae.** Aster like flowers in broad head; rosy purple; showy and fine. Height 5 ft. Blooms July to October.

CAMPANULA. (Canterbury Bells)—An elegant genus of plants, rich in color, profuse in bloom, and of easy culture. Height 2 to 3 ft. Blooms from June to September. Varieties, Calycanthema, Carpatica, Medium, Persicifolia, Pyramidalis Rotundifolia.

CHRYSANTHEMUM. (Hardy.) Pompon—A well known popular small flowered hardy varieties blooming late in fall. Colors; Bronze Red, Yellow, Crimson and White.

CLEMATIS. Davidiana—Not climbers. Large axillary clusters of fragrant blue flowers in July and August. Height 3 ft.

COREOPSIS. Lanceolata Grandiflora.—Large golden-yellow flowers on long stems; blooming from early summer until frost. Fine for cutting. Height 3 ft. Each **12c,** 10 for **$1.00.**

DAISY. Shasta—Large single white flowers, blooming throughout the summer. Very showy and attractive. Fine for cutting. Height 1½ to 2 ft. Each **12c,** 10 for **$1.00.**

DELPHINUM. (Perennial Larkspur)—A remarkably showy class of tall plants, producing magnificent spikes of blue, pink and white flowers in summer. No plants will afford greater satisfaction than these. Varieties;—Formosum, Coelestinum, Chinese Blue, Chinese White and Kelway's Fine Hybrids in colors.

FOX GLOVE. (Digitalis)—Ornamental plants, bearing spikes of long, tubular flowers. Very showy. Colors rose and white.

FUNKIA Subcordata. (Day Lily)—A very interesting and beautiful with luxuriant foliage and handsome pure white lily-like fragrant flowers.

GAILLARDIA. Grandiflora—Ornamental hardy plants. Flowers crimson and golden; 2 inches across; long stems. Blooms from summer to autumn; fine for cutting.

HELIOPSIS. (Orange Sunflower)—Flowers all summer. Height 3 ft.

HIBISCUS. Crimson Eye—Valuable bushy border plants, having broad leaves, large showy white flowers, with crimson eye in August. 3 to 4 ft. Each **12c,** 10 for **$1.00.**

HOLLYHOCK—A wonderful genus of showy plants growing from 5 to 7 ft. high, with brilliant double rosette flowers on stiff stems. Excellent for background or screens. Bloom June and July. **Finest Double Sorts,** White. Pink, Yellow, Crimson and Maroon.

PEONIES—Desirable border plants producing enormous very double blooms in June. Height 2 to 2½ ft. 15 Choice Named Varieties. Each **25c,** 10 for **$2.00.**

PHLOX. Perennial—These are justly esteemed as the finest of herbaceous plants. Perfectly hardy; very easy culture, and yield a profusion of fine, showy blooms on long stems. They are hardly equalled by any other plants for the decoration of the garden. Splendid in beds, in masses or in borders. Colors; Pure White, Pink, Crimson, etc. A large selection of varieties.

PHYSOSTEGIA. Virginica—Flesh or purple flowers in dense spike-like racemes in June. Height 2 to 3 ft.

PINKS. Hardy—Well known and popular border plants, with clove scented blooms. 4 varieties.

PLATYCODON. Grandiflora—Ornamental showy plants, of erect habit of growth and showy bell-shaped bluish-white flowers in June and July. Height 2 to 3 ft. Each **12c,** 10 for **$1.00.**

PLUMBAGO—Dwarf spreading habit; useful for edgings or rock-work. Bears clusters of deep blue flowers during summer and fall.

POPPY. Orientale—Brilliant single scarlet flowers. Very effective. Blooms July and August. Height 2 to 2½ ft.

RUDBECKIA—Among the most valuable hardy plants, producing enormous quantities of showy flowers on long stems. Excellent for cut flowers.

Golden Glow—Flowers golden yellow, 3½ inches in diameter, double, well formed. Plants bloom profusely from July to September. Height 6 to 8 ft. Each **10c,** 10 for **85c.** Whole clumps each **20c,** 10 for **$1.75.**

Purpurea—Giant purple flowers 4 inches across; very effective. Each **20c,** 10 for **$1.75.**

STOKESIA. Cyanea. (Cornflower Aster)—Showy Aster-like flowers of deep blue color, which measure 4 to 5 inches across. Easy to cultivate, succeeding in any open sunny situation. Grow 1½ to 2 ft. in height; blooms freely July to frost. Fine for cutting.

TRITOMA. Pfitzeri. (Red-hot Poker)—This sort is of gigantic size, height 4½ ft. with heads of bloom over 21 inches long of rich orange-scarlet, shading to a salmon rose on the edge. Gorgeous, and a decided acquisition. Each **20c,** 10 for **$1.75.**

VIOLETS. Hardy Russian—Valuable for moist or shady situations. Single dark blue flowers.

CLIMBING AND TRAILING SHRUBS.

AMPELOPSIS.

VEITCHII—Japan Creeper. Boston Ivy. A rapid growing climber which clings to walls, fences, trees, stumps, etc. with great tenacity. The leaves overlap one another, forming a dense sheet of green in summer, which changes to crimson scarlet in autumn. Small plants each **15c**, 10 for **$1.25.** Strong 2 yr. old, each **25c**, 10 for **$2.00.**

ARISTOLOCHIA.

SIPHO. (Dutchman's Pipe)—A most beautiful climber of rapid growth, with magnificent light green foliage, 10 to 12 inches in diameter. Has curious pipe-shaped yellowish brown flowers which are very unique and ornamental. Strong plants, each **60c**, 10 for **$5.00.**

BIGNONIA. TRUMPET VINE. A hardy climber, of loose trailing habit and bearing long trumpet-shaped attractive flowers of pinkish salmon color. Each **30c**; 10 for **$2.50.**

CELASTRUS.

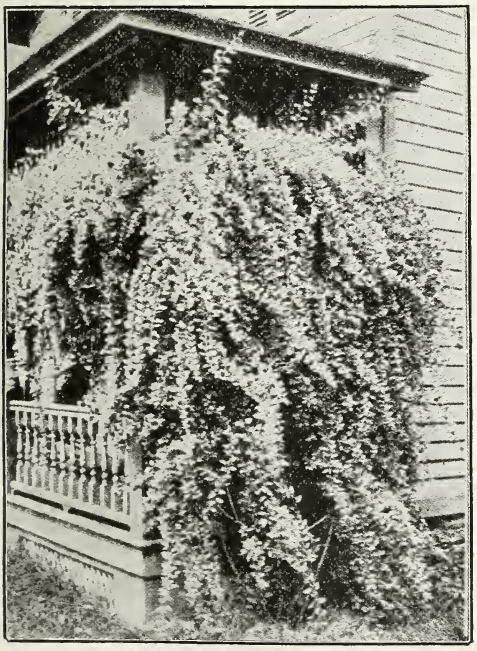
SCANDENS (Climbing Bitter Sweet)—A native climbing or twining plant, with fine, large leaves, yellow flower and clusters of orange-capsuled fruit in the autumn. It grows 10 to 12 feet in a season. Each **25c**, 10 for **$2.00.** 100 for **$15.00.**

Clematis.

Among the most popular of hardy perennials and not exceeded in beauty and effectiveness by any other class of climbers. They are excellent as a screen for fences. pillars, or trailing on walls or arbors, or on verandas. Very effective in masses of rock work and some are valuable for cultivation in pots. Clematis do best in deep, rich sandy, loamy soil, well mulched with manure, and the finest results are obtained in partial shade, where there is a liberal supply of water given at the roots.

NAMED SORTS—These include **Jackmanni** (large violet purple), **Henryii** (large creamy white), **Madam Edw. Andre** (large bright velvety red). Strong plants each **50c** 10 for **$4.00.**

COCCINEA—Bell-shaped flowers of bright coral red color. While it is a small variety, is very effective and blooms from June to fall. Each **35c**, 10 for **$2.75.**



CLEMATIS PANICULATA

PANICULATA—A rapid luxuriant growing sort, bearing immense clusters of small double white flowers in greatest profusion in late summer. It is sweet scented and most desirable for verandas, fences, trellises, and grows from 20 to 30 ft. in a single season. Should be cut back to the ground each year. Each **25c**, 10 for **$2.00.**

Honeysuckle.

Monthly Fragrant—Blooms all summer. Red and yellow very fragrant flowers. Each **30c**, 10 for **$2.50.**

Japan Golden Leaved—A handsome and very desirable sort with beautifully netted and variegated foliage. Each **35c**, 10 for **$2.50.**

Scarlet Trumpet.—A strong rapid grower which produces scarlet flowers not sweet scented. Each **35c**, 10 for **$2.75.**

HALL'S JAPAN (Halleana)—A strong, vigorous, almost evergreen sort. Pure white flowers changing to yellow, very fragrant. Blooms abundantly from July to December, holds its leaves until January. Each **25c**, 10 for **$2.00.** 100, **$15.00.**

IVY.

ENGLISH—A well known sort which is used for covering walls or planting in cemeteries, especially in the shade. Each **25c**, 10 for **$2.00.**

KUDZU VINE. Pueraria Thunbergiana or Jack and the Bean Stalk Vine.

The most remarkable climber extant. In rich soil will grown 70 feet in one season. It starts into growth slowly, but after 3 or 4 weeks weeks grows almost so rapidly as to be beyond belief. Leaves are of the shape of lima beans, dark green, soft and wooly, fine for porches, arbors, old trees, etc., Strong plants each **35c**, 10 for **$2.75.**

MATRIMONY VINE—Lycium.

A well known hardy fast growing vine. It is very handsome when covered with scarlet foliage in the autumn. Used as a trailer, especially under trees or on terraces, or any kind of a steep slope, as its roots hold the soil in place. Strong plants each **25c**, 10 for **$2.00.** 100, **$15.00**

SILK VINE—Periploca.

A rapid-growing beautiful climber. Will twine around a tree or other support to the height of 30 to 40 ft. Has beautiful glossy foliage and purple brown clusters of flowers, borne in the axil of the leaf. Each **35c**, 10 for **$2.50.**

WISTARIA.

CHINESE PURPLE (Sinensis)—An elegant and rapid growing climber, attaining a height of 20 feet in a season. Has hundreds of long, pendulous clusters of sweet scented pale blue flowers in May and June and in autumn. Strong 2 yr. plants each **50c**, 10 for **$4.00.**

CHINESE WHITE—Similar to above. Pure white flowers beautiful. Each **60c**, 10 for **$5.00.**

WISTARIA

ORNAMENTAL GRASSES.

Price All Varieties, 25c each; 10 for $2.25.

ERIANTHUS RAVENNAE (Plume Grass)—Grows six to eight feet high and produces handsome plumes in fall.

EULALIA GRACILLIMA—(Japan Rush)—The most beautiful of all the Eulalias, with narrow, graceful foliage, entirely green without variegation, except that the mid-rib is of a silver sheen. Perfectly hardy, very valuable.

EULALIA JAPONICA VARIEGATA—Leaves striped white and green longitudinally.

EULALIA ZEBRINA (Zebra Grass)—A peculiar variegated grass, growing six feet high. The variegation is unlike that of any other plant, being across the leaf in regular bands, dark green and light yellow alternating.

The dried blooms of all the Eulalias make beautiful winter ornaments.

Roses, Bedding Plants, Etc.

Our List Comprises three Classes as below. The Varieties are standard sorts and the best of their class. For larger quantities ask for special prices.

Large Rose Plants can only be sent by Express, at purchaser's expense.

EVERBLOOMING ROSES.

Tea-scented and of delicious fragrance, free-blooming and exquisite form and coloring. They make excellent bedders, and yield a succession of bloom through the entire season.

Price (unless otherwise specified).

Small Plants—15 cts. each; $1.50 per doz.

Large Plants—30 cts. each; $3.00 per doz.

American Beauty (Hybrid Tea)—Deep rose shaded towards center, a rich carmine crimson; delicious fragrance. **Strong Plants 50 cts. each; $5.00 doz. Medium Plants, 25 cts. each; $2.50 dozen.**

Catherine Mermet, bright flesh color.

Bon Silene, deep rose.

Devoniensis, creamy white.

Hermosa, pink, very double.

General Tartas—An old Rose, but one that has many admirers; color, rich, deep rose.

Golden Gate—Rich creamy-white with center and base of petals soft yellow, frequently tinted with soft rose; free bloomer.

Homer—Rose-salmon center; free bloomer; very pretty.

Killarney—The finest pink forcing Rose ever introduced. In coloring it is especially beautiful, being an exquisite shade of deep seashell-pink. The buds and flowers are of enormous size, the petals being frequently two and one-half inches deep.

HARDY HYBRID PERPETUAL ROSES

Small Plants, 15 cts. each; $1.50 per doz.

Large 2 year Plants, 30 cts. each, $3.00 doz.

Alfred Colomb, bright carmine red.

Gen'l Jacqueminot, rich crimson.

Victor Verdier, rose, free bloomer.

Coquette des Alps, white shaded crimson.

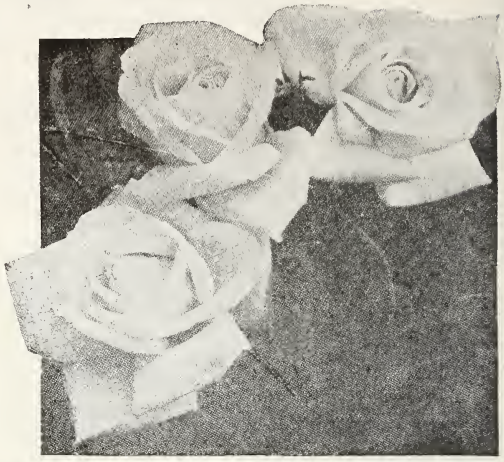
La Reine, rosy pink.

Martha Washington, fine white.

Anna de Diesbach, bright rose, fragrant.

Jules Margotten, deep rose, large and fine.

Madame Gabriel Luizet, silvery, pink, large.



HYBRID PERPETUAL ROSES—Cont'd.

Paul Neyron, dark rose, rich, fragrant.

Prince Camille de Rohan, dark crimson.

Magna Charta, bright, pink, large, fragrant.

HARDY CLIMBING ROSES

Baltimore Belle—Double. Pale blush, nearly white.

Crimson Rambler—The flowers are produced in trusses, fairly covering the plant from the ground to the top, so that it is one mass of glowing crimson. The profusion of bloom is marvelous, over three hundred blossoms having been counted on one shoot. Strong and vigorous.

Pink Rambler—Pure satiny rose, single in clusters. The partially open buds being bright, light carmine, thus producing a strong and pleasing contrast.

White Rambler—Closely resembles the Crimson Rambler in vine and foliage. Large clusters of pure white flowers, which are deliciously fragrant. The flowers remain on the plant a long time and keep a long time when cut.

Yellow Rambler—The flowers are borne in immense clusters, often as many as 150 blossoms in a bunch. The color is a decided yellow; the flowers are very fragrant; the habit of growth is very vigorous. Well established plants often making shoots 8 to 10 feet in one season.

Large Plants—30 cts. each; $3.00 per dozen.

Extra Strong Plants—50 cts. each; $5.00 per dozen.

General List of Bedding Plants.

	Each.	Doz.
Ageratum, blue	10¢	$1.00
Alternanthera, of sorts	8¢	.75
Asters, assorted colors	5¢	.50
Cannas, Dwarf, started	15¢	1.50
Centaurea Gymnocarpa	10¢	1.00
Coleus, new sorts	8¢	.75
Chrysanthemums	15¢	1.50
Geranium, sorts	10¢ to 15¢	$1.00 to 1.50
Heliotrope, sorts	10¢	1.00
Lantana	10¢	1.00
Lobelias, sorts	8¢	.75
Marigolds, sorts	5¢	.50
Nasturtiums, sorts	5¢	.50
Pansies	5¢ to 10¢	$0.50 to .75
Petunia, double; sorts	15¢	1.50
Petunia, single; sorts	10¢	1.00
Phlox Drummondii	5¢	.50
Salvia, scarlet	10¢	1.00
Verbenas, finest	8¢	.75
Vincas, sorts	8¢	.75
Zinnias, sorts	5¢	.50

Fruit Trees

Select thrifty young trees in preference to old or very large ones; the roots are more tender and fibrous and they bear transplanting better and are more apt to live; they can also be more easily trimmed and shaped to any desired form, and in the course of a few years will usually outstrip the older ones in growth. If not prepared to plant when your stock arrives, "heel in" by digging a trench deep enough to admit all the roots and setting the tree therein, carefully pack the earth about the roots, taking up when required. Never leave the roots exposed to the sun and air.

APPLES.

STANDARD.

We can furnish all varieties usually catalogued, but the following list comprises the most desirable sorts:

Three years old, 5 to 7 feet high. **Price 30c each; $2.50 for 10.**

SUMMER VARIETIES.

EARLY HARVEST—Pale yellow, fine flavor, August.
GOLDEN SWEET—Pale yellow, sweet and good; August.
KESWICK CODLIN—Large pale yellow, pleasant; August.
OLDENBURG (DUCHESS OF OLDENBURG)—Large, striped over a greenish yellow ground.
RED ASTRACHAN—Large, crimson, juicy, with rich sub-acid flavor; hardy. July.
YELLOW TRANSPARENT—Pale yellow, good quality.

AUTUMN VARIETIES.

FALL PIPPIN—Very large, yellow, rich, aromatic.
GRAVENSTEIN—Large, striped, fine quality; September and October.
MAIDEN'S BLUSH—Large, beautiful, blush cheek.
RAMBO—Yellow, streaked with red; October to December.
RED BEITIGHEIMER—Pale cream, covered with crimson.

WINTER VARIETIES.

BALDWIN—Large, dark red, productive.
BEN DAVIS—Large, handsome, striped; good quality.
GANO—Deep red, fine quality; good shipper and keeper.
GOLDEN RUSSET—Medium, dull russet, crisp, juicy.
GRIMES GOLDEN PIPPIN—Medium to large, skin golden yellow, flesh crisp, tender, juicy, long keeper.
JONATHAN—Medium, red and yellow, flesh tender, juicy and rich.
NORTHERN SPY—Large, striped red; good keeper.
RAWLE'S JANET—Medium, yellow striped with red, rich, crisp and juicy; a long keeper.
ROME BEAUTY—Large, yellow shaded red, tender.
SMITH'S CIDER—Medium, tender and juicy; sub-acid.
WEALTHY—Large, round, skin smooth, splashed dark red; flesh white, tender, juicy, sub-acid.
WHITE PIPPIN—Large, pale yellow, rich, sub-acid.
WINE SAP—Medium, deep red rich, sub-acid.

CRAB APPLES. 5 to 7 feet.

Price, 25c each; $2.50 for 10.

HEWES CRAB FOR CIDER—Best cider crab grown.
YELLOW SIBERIAN—Golden amber, with red blush in sun.
HYSLOP—Deep crimson, very popular on account of its large size, beauty and hardiness.
TRANSCENDANT—Skin yellow, striped with red.

PEARS.

STANDARD AND DWARF.

6 to 7 feet, first-class. **Price, 50c each; $4.00 for 10.**

BARTLETT—Large, clear, yellow, juicy. August.
FLEMISH BEAUTY—Large, juicy, rich and fine; September to October.
HOWELL—Large, yellow, splendid quality. September.
KIEFFER'S HYBIRD—Large, rich color and good quality.
LAWRENCE—Yellow, thickly dotted, fine flavor.
SECKEL—Small, yellowish brown, one of the best.
SHELDON—Large, round, russet-red. October.
TYSON—Large, yellow with brown cheek, sweet.

QUINCES. 4 to 5 feet.

Price, 50c each; $4.00 for 10.

MEECH'S PROLIFIC—Fruit bright yellow; flesh very fragrant and tender; October.
ORANGE—Large bright golden yellow, fine quality; flesh firm, cooks tender. October.

PEACHES. 4 to 6 feet.

Price, 25c each; $2.00 for 10.

CHAMPION—Creamy white with red cheeks, free-stone, excellent quality; early in August.
CRAWFORD'S EARLY—Large, yellow, of good quality, free-stone; early in September.
CRAWFORD'S LATE—Large, yellow with red cheek, freestone; last of September.
EARLY RIVERS—Large, creamy white, with pink cheeks; early in August.
ELBERTA—Large, yellow with red cheek, flesh yellow; firm, juicy, of high quality, very prolific; September.
FITZGERALD—Large, yellow suffused with red, flesh deep yellow, best quality, hardy and productive; early September.
HEATH CLING—Large, flesh white, juicy and melting; October.
MOUNTAIN ROSE—Large, handsome red cheek, flesh white, juicy; one of the best; August.
OLD MIXON CLING—Large, yellow with red cheek; September.
OLD MIXON FREE—Large, yellow with red cheek; September.
SMOCK'S FREE—Large, yellow, very productive; late September

CHERRIES.

HEART AND BIGARREAU (SWEET).

5 to 7 feet, first-class. **Price, 60c each; $5.00 for 10.**

ALLEN—Large, nearly black, very mealy and firm, productive and excellent quality.
BLACK TARTARIAN—Very large, purplish black, juicy, rich, excellent, productive; last of June.
GOVERNOR WOOD—Large, light red, juicy, rich, delicious. Three healthy and productive; June.
NAPOLEON—Large, pale yellow, firm, juicy, productive.
ROCKPORT BIGARREAU—Large, yellow, juicy, and sweet.
YELLOW SPANISH—Large, pale yellow with light red cheek; late June.

DUKE AND MORELLO (SOUR).

4 to 6 feet. first-class. **Price, 50c each; $4.00 for 10.**

DYEHOUSE—A very early and sure bearer; ripens a week before Early Richmond; fine quality; June.
EARLY RICHMOND—Medium, dark red, fine quality.
ENGLISH MORELLO—Dark red, rich, acid, juicy, and good.
MAY DUKE—Large, red, and excellent variety.
MONTMORENCY—Large, red, fine flavor; finest acid cherry.
OLIVET—Large, red, tender, rich; sub-acid flavor.

PLUMS.

STANDARD.

ON PLUM STOCKS, 5 to 7 feet. Price, 50c each; $4.00 for 10.

ABUNDANCE—Large, yellow with heavy bloom, good quality, very prolific.
BEAUTY OF NAPLES—Medium size, green with purple cheek; abundant bearer.
BURBANK—The largest and best variety, color red, excellent quality, hardy and vigorous grower.
DAMSON—Small, oval fruit, purple, hardy, productive.
GERMAN PRUNE—Medium, oval fruit, purple, fine quality.
GREEN GAGE—Small, delicious, very prolific, fine quality.
LOMBARD—Medium, red, juicy, hardy and productive.
PURPLE EGG—Rich purple, fine flavor, best market variety.
RED JUNE—Large, red, fine quality; strong, vigorous grower. Finest extra early plum.

MULBERRIES. 5 to 6 feet.

Price, 60c each; $5.00 for 10.

DOWNING'S EVERBEARING—One of the most prolific varieties, bearing an abundance of large, black, sub-acid fruits, hardy; fruits about three months.
NEW AMERICAN—An everbearing variety; large fruit of the finest flavor; hardy; fruits about three months.

Grape Vines, Small Fruits, Etc.

DISTANCES FOR PLANTING. Grapes, rows 5 to 6 feet apart, 4 to 5 feet in rows. Blackberries, 3½ to 4 feet apart, 3 to 4 feet in rows. Currants, 3 feet apart each way. Gooseberries, 3 feet apart each way. Raspberries, rows 4 feet apart, 3 feet in rows. Strawberries, for field culture, rows 3 to 3½ feet apart, 1 to 1½ feet in rows; for Garden Culture, plant in beds 4 feet wide, 3 rows in each bed, plants 1 foot apart in rows.

GRAPE VINES.

All Two-Year-Old Selected Stock.

Black or Purple Grapes.

CAMPBELL'S EARLY—Bunch and berry large, glossy, black, sweet and juicy; fine quality. 25c each; $2.50 doz.
CONCORD—Large, black grape, hardy and productive; juicy and sweet. 10c each; $1.00 doz.
EARLY OHIO—Earliest black grape known; healthy and vigorous grower. 25c each; $2.50 doz.
EATON—Bunch and berries very large, skin black and finest quality 25c each; $2.50 doz.
***IVES' SEEDLING**—Dark purple, sweet. 10c each; $1.00 doz.

Red Grapes.

BRIGHTON—Bunch large, berries large, red, round, excellent flavor; one of the earliest 15c each; $1.25 doz.
***CATAWBA**—Berries large, round; when ripe a dark copper color; sweet, rich, musky flavor. 15c each; $1.25 doz.
DELAWARE—Small, light red, thin skin, very juicy, sweet, sprightly, fine flavor. 15c each; $1.50 doz.

White or Yellow Grapes.

NIAGARA—Vine remarkably hardy and strong grower; bunches very large and compact; berries large, greenish white, slightly ambered in the sun; skin thin but tough, and does not crack. 15c each; $1.25 doz.
POCKLINGTON—A seedling of the Concord, resembling that variety in leaf, vine, habit of growth, hardiness and productiveness. Bunch and berry very large; attractive golden yellow color. 15c each; $1.25 doz.
Varieties marked with a * are best for arbors.

BLACKBERRIES.

50 cents per Dozen. $3.50 per 100 except where noted.

ANCIENT BRITON—Large fruit, stems loaded with good sized berries of fine quality; vigorous grower, hardy.
EARLY HARVEST—Very prolific, choice variety.
BLOWER'S (new). Large, luscious berries, rich in quality and quantity. 75c per doz.; $3.00 per 100
ELDORADO—Large fruit, borne in clusters and ripen well together, fine quality, good keeper.
KENOYER (new).—Early, berry large of good color, heavy yielder and good shipper. 10c each; $1.00 doz.
MERSEREAU (new)—Extremely hardy, berries sweet, rich, melting and luscious without core. Good keeper and shipper. 75c per doz.; $3.00 per 100
SNYDER—Medium size, sweet and juicy; extremely hardy and very productive.

DEWBERRY.

LUCRETIA—One of the low-growing, trailing blackberries. In earliness, size and quality it equals any of the tall-growing sorts. It has proved highly satisfactory wherever tried, and many say it is the best of all the blackberry family. 50 per doz.; $3.00 per 100-

CURRANTS.

12 cents Each; $1.25 per Dozen.

BLACK CHAMPION—Large bunch and berry, excellent quality, strong grower, very productive.
CHERRY—Fruit large, bunch small, deep red, acid.
FAY'S PROLIFIC—Extra large stems and berries, color rich red, fine quality, very productive.
POMONA—Bright red, extra fine quality and enormously productive; strong, vigorous grower.
RED DUTCH—An old favorite variety with large red berries.
WHITE GRAPE—Large, yellowish white, sweet, excellent quality and valuable for the table,

GOOSEBERRIES.

All 25 cents Each.

DOWNING—Very large and fine quality. $2.00 doz.
HOUGHTON—Medium size, very productive. 2.00 doz.
SMITH'S IMPROVED—Large, thin skin, best for table use 2.00 doz.
INDUSTRY—English sort, of very large size, hardy. 2.50 doz.

RASPBERRIES.

50 cents per Dozen; $3.00 per 100.

BRANDYWINE—Large size, light crimson color, good quality and firm, vigorous and productive. One of the best, well-tested, large early berries for the North.
CUMBERLAND—The largest black cap; a healthy, vigorous grower; very productive and of finest quality.
CUTHBERT—Large, firm, deep rich crimson, of excellent quality, tall, strong, vigorous, perfectly hardy and very productive. Ripens medium to late.
GREGG—A large black variety, fruit firm, of excellent quality and a good shipper.

STRAWBERRIES.

All varieties offered in this list have perfect or bi-sexual blossoms, except those marked (P), which are destitute of stamens, and are termed pistillate or imperfect flowering varieties and must be planted near some perfect-flowering sort or they will produce little or no fruit.

Dip the plants in water as soon as received, and bury the roots in moist, shady ground till you are ready to set them out. Neglect for an hour or so is often fatal.

25c per dozen; $1.00 per 100; $7.50 per 1000.

BISMARK—Very large and productive, bright scarlet, fine quality, good shipper, requires rich soil.
BUBACH, No. 5 (P)—Very large and productive, bright scarlet; a fine market variety; early to medium.
CLYDE—Large, light scarlet color; conical shape; very productive, good quality.
CUMBERLAND—Large light red; conical shape; handsome and showy; plant vigorous and productive.
ENHANCE—Large, bright crimson, firm, very prolific.
GANDY—Large firm berries, excellent long-keeping and shipping variety.
GLEN MARY—Large, bright red; sweet, rich, good flavor.
JESSIE—Large, handsome berry, of good quality, vigorous grower; good market sort.
SENATOR DUNLAP—Large, bright red; firm, splendid keeper and shipper; excellent quality; one of the best.
WARFIELD—Early and productive; berries large and firm.

Vegetable Plants and Roots.

As we grow these plants ourselves, they are always well packed and can be shipped fresh from beds on short notice

Prices Do Not include Prepayment by Mail or Express.

ASPARAGUS ROOTS—Two-year-old.

	Per 50	Per 100	Per 1,000
Conover's Collossal	$0.50	$ .80	$6.00
Palmetto	.60	1.00	6.50

EARLY CABBAGE PLANTS.
(Ready about April 1st.)

	Per 100	Per 1,000
Early Jersey Wakefield	$0.50	$.400
Louisville Drumhead	.50	4.00

LATE CABBAGE PLANTS.
(Ready in June.)

Large Late Drumhead	.30	2.50
Premium Flat Dutch	.30	2.50

CAULIFLOWER
(Ready April 1st.)

	Per doz.	Per 100
Henderson's Showball	$0.25	$1.50
Early Dwarf Erfurt	.25	1.50

CELERY PLANTS.
(Ready June to August

	Per 100	Per 1,000
White Plume	$0.50	$3.50
Golden Heart	.50	3.50
Golden Self-Blanching	.50	3.50

CHIVES.

	Each	Per doz.
Good clumps	$0.10	$1.00

EGG PLANTS.
(Ready in May.)

	Per doz.	Per 100
New York Improved	$0.40	$2.50

HORSE RADISH SETS.

Per Dozen	$0.15
Per Hundred	.75
Per Thousand	6.00

PEPPER PLANTS.

	PER doz.	Per 100
Large Bell or Bull Nose	$0 25	$1.50
Ruby King	25	1.50

RHUBARB ROOTS.
(Ready April 1st.)

	Each	Per doz.
Small Roots	$0.08	$0.75
Large Clumps	.25	2.50

SWEET POTATO PLANTS.
(Ready early in June.)

	Per 100	Per 1,00
Nasemond Yellow	$ .30	$2.50
Jersey Yellow	.30	2.50
Red Bermuda	.35	3.00
Southern Queen	.35	3.00

TOMATO PLANTS
(Ready about May 1st.)

Acme, Beauty, Stone, Dwarf Champion, Buckeye State, Trucker's Favorite, Ponderosa.

	Per doz.	Per 1000
Transplanted	$0.20	$1.50
From hot-beads transplanted	.15	1.00

GRASS AND CLOVER SEEDS.

We endeavor to supply customers with the very highest quality of all Grasses and Clover Seeds both as regards maturity, purity and germination. We have a competent expert in this department and a well equipped laboratory in which rigid tests are made of all stocks purchased. Every care is used to select from the best and cleanest crops which are well matured and which will insure good germination.

We are one of the largest dealers in Grasses, Clover and Field Seeds in the central west. Our warehouse and seed cleaning establishment at 5th, Lock & Eggleston Ave., are equipped with the most modern machinery which includes more than a score of Seed Separators, Mills, Buckhorn Machines, Graders, etc.

Our building is seven stories high, contains over 125,000 sq. ft. of floor space and is well equipped for unloading and quick dispatch of orders.

Our traveling men visit all parts of the country and are constantly on the lookout for best stocks of field seeds and we are always alert to improvements in varieties and selection of stocks for best results and customers can be assured of thorough knowledge, thorough equipment, careful attention to orders and lowest prices.

SUCCESS WITH GRASS AND CLOVER SEEDS.

Thorough preparation is of most importance for successful crops. Land filled with weeds had better be put in some quick growing crop such as Millet or Cow Peas previous to sowing in Grasses or Clovers. Thorough tillage by deep plowing, harrowing, pulverizing should always be done before grass seeds are sown, and land that does not drain well should be sub-soiled and limed.

If soil needs enriching and usually it does, Commercial fertilizer, such as bone meal, Peruvian Guano or other good fertilizer, will give excellent results, at the rate of 150 to 300 lbs. per acre. Sowing can be done either in the spring or fall. If in the spring, February, March and April are the best months for this locality or further South earlier.

Grass seeds can be sown either on or with a grain crop or alone. If alone, usually better and quicker results are obtained. In sowing seeds, a Grain Drill and Wheel-Barrow Seeder are best for light seeds. For heavy grass and clover seed any of the rotary grass seeders will give satisfaction or a Wheel-barrow Seeder will give an even distribution. Where heavy seeding is required it is better to sow across both ways, sowing half the seed one way and then crossing the opposite direction with the other half.

Grass Seeds should be covered carefully but not too deep, usually one inch is sufficient; Clover seeds do better if covered one half to three-quarters of an inch.

Rolling is of most decided benefit on all seeds as if the ground is packed firmly there is much better germination and a better hold on the soil. Sometimes rolling will be sufficient as a covering especially on small clover seeds but grass seed generally, if applied broadcast by hand or with a Seeder, had better be harrowed and afterwards rolled.

Young grass after it has started or old meadows or pastures will be greatly benefited in the spring after the growing season has commenced, if an application of 100 to 150 lbs. of Peruvian Guano is applied broadcast per acre. This gives a quick, vigorous start and as the fertilizer contains all elements of plant food, being especially high in phosphoric acid, it is one of the most valuable of all natural manures.

Our Office and Seed Cleaning Plant

It is one of the Largest and best Equipped Seed Cleaning Plants in the World

Our Plant Covers the entire Block Bounded by Fifth and Lock Sts., Eggleston Ave. and Pennsylvania Railway

601, 603 and 605 East Fifth St.

GENERAL LIST OF GRASS SEEDS.

Prices on Grass Seeds this year are moderate. The European War has affected some articles which are imported, causing some advance in price. On others, however, due to lack of exportation, prices are lower.

The prices given here are those ruling at the time this Catalogue was published, (January 1st,) but are approximate only as the market is always fluctuating. We will cheerfully quote the lowest market prices at any time and ask that you send us list of your requirements; **or if orders are entrusted to us they will be filled at the lowest market prices on the day received.**

IF GRASS OR CLOVER SEEDS ARE TO BE SENT BY MAIL ADD 5c PER LB EXTRA FOR POSTAGE.

ORCHARD GRASS.

Particularly suited to upland, loamy or moderately stiff soils. It ripens 3 weeks ahead of Timothy and is excellent to sow with Red Clover. It should be cut when in bloom as at that time makes most nutritious hay but if allowed to become old it contains a great deal of woody fibre; usually yields two crops and is one of the most valuable grasses for both pasturage and hay.

If sown alone it requires 1½ to 2 bus. per acre; if with Red Clover 1 to 1½ bus. of Orchard Grass to 5 to 6 lbs. of Red Clover. If for seed the same quantity of Clover and ¾ of a bu. to 1 bu. of Orchard Grass.

J. C. McC. Best—Per lb. **20c**; per bu. (14 lbs.), **$2.25**; 8 bus. (bag) and over, **$2.15** per bu.

ORCHARD GRASS

TIMOTHY.

Too well known to need description. It is the most desirable of all grasses for hay but should not be grazed as the tramping of cattle hoofs causes it to die. In this section Timothy is best suited to low, flat or alluvial soils where there is a fair amount of moisture but does not grow well in water sogged soil. Requires alone, 1 pk. per acre; if with Clover, 8 lbs. Timothy and 5 to 6 lbs. of Clover.

Price, J. C. McC. Best—Lb., **10c**; bu. (45 lbs.), **$3.85**; 5 bu. and over, **$3.75** per bu.

Bags, **20c** each extra.

RED TOP OR HERD'S GRASS.

Particularly suited to low and wet situations and affording a splendid pasturage and fair crops of hay. Ripens at about the same time as Timothy and excellent to sow with this grass if pasturing of meadows is contemplated. It is also valuable to sow on alluvial land liable to wash and when once established and some care taken will last indefinitely.

Seed is of three classes:

FANCY (free of chaff) required 8 to 10 lbs. alone or 3 to 4 lbs. (in mixtures) per acre.

Price J. C. McC. Best Fancy—Per lb., **40c**; 100 lbs., **$32.00.** Bags **20c** each, extra.

Export Fancy—Per 100 lbs., **$30.00.** Bags, **20c** extra.

UNHULLED (seed with hull on) 1 bu. per care. Lb., **20c**; bu. (14 lbs.), **$2.00**; 8 bus. and over, **$1.85** per bu.

CHAFF (very little seed in it) not worth sowing. Price **25c** and **30c** per bu.

TALL MEADOW OAT GRASS.

A very fine grass which is suitable for upland soils and especially valuable for mixture with Orchard grass. It ripens about the same time and does not have a tendency to grow in clumps or tufts—hence, forms a better sod. Cut when in bloom it is very nutritious and it affords wonderful amount of pasturage. Requires alone 1½ to 2 bus. per acre; in mixtures from ½ to ¾ of a bu.

J. C. McC. Best—Per lb., **25c**; per bu. (11 lbs.), **$2.50**; 5 bus. or over, **$2.40** per bu. Bags included.

GENERAL LIST OF GRASS SEEDS—Cont'd.

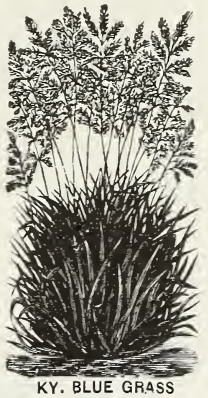
MEADOW FESCUE OR ENGLISH BLUE GRASS.

A most valuable grass for pasture and affords good crops of hay where particularly suited. It grows best on low damp soil and is especially desirable for all permanent pastures. (Called Evergreen Grass in some sections).

Requires one bu. per acre, if alone. In mixture, from ½ to ¾ of a bu.

J. C. McC. Best—Per lb., **15c**; per bu. (24 lbs.), **$2.50**; 5 bus. and over, **$2.40** per bu. Bags included.

KENTUCKY BLUE GRASS.


KY. BLUE GRASS

A well known pasture grass which grows well on any stiff or loamy soil in central or northern states. It is indigenous to sections of Ohio, Kentucky and Missouri and in these sections is the main grass depended on for pasture or for stock grazing for which these sections are famous. There is no better or more nutritious pasturage.

Kentucky Blue Grass is also largely used for lawns and when once established lasts indefinitely. It is slow starting, however, and for lawns should be mixed with other quick growing short grasses. For pastures, sow 1½ to 2 bus. per acre; for lawns, 4 to 5 bus. per acre.

Price J. C. McC. Best Seed—per lb., **15c**; 2 lbs., **25c**; bu. (14 lbs.), **$1.50**; 8 bus. (bag) and over, **$1.45** per bu. Bags included.

CANADIAN BLUE GRASS.

Closely akin to Kentucky Blue Grass but not nearly so valuable for general purposes. Canadian Blue Grass is particularly well suited to high, dry situations and rocky soil, also under trees where the soil is more or less impoverished and very dry. It does not make a very good turf as it produces a large amount of stems and comparatively little forage. Valuable for mixtures and upland soil for pasture. Per lb., **15c**; 2 lbs., **25c**; bu. (14 lbs.) **$1.40**; 5 bus. and over, **$1.30** per bu. Bags included.

PERENNIAL RYE GRASS.

A quick growing grass which is most suitable for mixtures both pastures, hay and lawns. Succeeds well on almost any soil not water sogged and affords good quick, nutritious grazing. If alone requires 1½ bu. per acre. In mixture, from 2 to 3 pks. per acre.

J. C. McC. Best—per lb., **15c**; per bu. (24 lbs.), **$1.60**; 5 bus. and over, **$1.50** per bu. Bags included.

PACEY'S IMPROVED SHORT RYE GRASS.

Similar to above except that it does not grow quite so tall and is superior for lawns and fine pastures to Perennial Rye Grass.

J. C. McC Best—Per lb., **20c**; per bu. (24 lbs.), **$2.25**; 5 bus. and over, **$2.15** per bu. Bags included.

ITALIAN RYE GRASS.

In growth somewhat similar to Perennial Rye Grass but little quicker maturing. It is especially liked in Southern States and on most of the low Delta country yields good crops of very early hay. Valuable for mixture or quick hay crop. Requires same quantity per acre as Perennial.

J. C. McC. Best—Per lb., **15c**; per bu. (24 lbs.), **$1.60**; 5 bus. and over, **$1.50** per bu. Bags included.

SHEEP FESCUE.

An extremely valuable pasture grass for high, dry situations or rocky or gravelly soils. It affords excellent grazing and withstands adverse conditions often when many other varieties burn out. The foliage is of fine texture and it has a tendency to grow in tufts and close grazing is desirable. Especially valuable for mixture.

Requires alone 1½ to 2 bus. per acre. In mixture ½ to 1 bu.

J. C. McC. Best—Per lb., **20c**; per bu. (14 lbs.), **$3.00**; 5 bus. and over, **$2.90.** Bags included.

JOHNSON GRASS.

Particularly suited to extreme Southern States where it is one of the most important hay and pasturage grasses. In this section and many other states, however, it is regarded as a pest and sometimes prohibited by law from sowing. When once established no droughts, methods of culture or applications of chemicals seem to eradicate it and a small piece of the root will propagate itself and every piece make quite an amount of Johnson Grass in a short time.

We do not, therefore, advise dissemination of Johnson Grass except in extreme Southern states.

If cut before the heads appear it makes excellent nutritious hay but if a little old contains woody fibre and is not nutritious.

Seed should be sown in the spring at the rate of one bu. per acre.

J. C. McC. Best—Per lb., **20c**; per bu. (25 lbs.), **$3.50**; 5 bus. or over, **$3,25** per bu. Bags included

BERMUDA GRASS.

Of enormous benefit in the South for pastures and withstands any amount of drought or heat when once well established. On rich, loamy soil it will produce good hay which is very nutritious. It flourishes best in the hot summer months when pasturage is scarce and after frost becomes brown and yellow. Even the dry leaf stalks and roots are very nutritious.

Bermuda Grass forms excellent summer lawns in the Southern states and is largely used for this purpose. It is largely propagated by roots which are long, fibrous jointed, which if cut up will take root and form a plant from every joint.

Seeding, however, is much easier, much more economical and thoroughly satisfactory. Soils must be gotten in fine condition and seed covered lightly. Use 3 to 5 lbs. per care.

J. C. McC. Best—Per lb., **55c**; 10 lbs. and over, **50c** per lb. Bags included.

CREEPING BENT GRASS.

Especially valuable where close, thick, fine sod is desired—hence, valuable for putting greens and fine lawns. If sown alone requires 4 to 5 bus. per acre

J. C. McC. Best—Per lb., **35c**; per bu. (14 lbs.), **$4.00**; 5 bus. and over, **$3.75** per bu. Bags included.

RHODE ISLAND BENT GRASS.

Similar in general characteristics to Creeping Bent Grass but little coarser growing. For sowing requires the same quantity per acre as Creeping Bent Grass.

J. C. McC. Best—Per lb., **35c**; per bu. (14 lbs.) **$4.00**; 5 bus. and over, **$3.75** per bu. Bags included.

CRESTED DOGSTAIL.

Very much esteemed for lawns and mixtures in many of the northern states, producing a quick growth of short grass, which is, however, of little forage and many stems.

Per lb., **30c**; per bu. (20 lbs.), **$5.00.** Bags included.

J. C. McC. CLOVER SEEDS.

This is one of our specialties and we are among the largest handlers in the central western states. Owing to the European War the price of Clover seed has been very erratic. Prices given here are at present reasonable but are subject to market fluctuations. **Our J. C. McC. qualities** are the very best but if lower grades are wanted will be glad to submit samples on application.

Bags for Clover Seed holding 2½ bus. 20c each extra and must be remitted on all orders.

RED CLOVER.

Too well known to need extended description. Can be sown either in the spring or fall and requires ⅛ to ⅙ of a bu. per acre alone or 5 to 6 lbs. per acre if in mixture with grasses.

J. C. McC. Best—Per lb., **20c;** per bu. (60 lbs.), **$10.50;** 5 bus. and over, **$10.35** per bu. Bags **20c** each extra. Current prices on request.

MAMMOTH OR SAPLING CLOVER.

Similar to Red Clover but of larger growth and blooms 3 weeks later—hence, more valuable for sowing with Timothy. It also forms better aftermath than Red Clover. Requires same quantity of seed as Red Clover per acre.

J. C. McC. Best—Per lb., **20c;** per bu. (60 lbs); **$10.50;** 5 bus. and over, **$10.35** per bu. Bags extra, **20c** each. Current prices on request.

ALSIKE CLOVER (also called Swedish Clover.)

Similar in growth to Red Clover but not quite so vigorous. Blossoms flesh color. Blooms later and at the same time as Timothy. Valuable for hay and more satisfactory for pasturage as it lasts longer and will stand more grazing.

If sown alone requires 5 to 8 lbs. per acre or in mixture 3 to 4 lbs. per acre.

J. C. McC. Best—Per lb., **20c;** per bu. (60 lbs.) **$10.25;** 5 bus. and over, **$10.15** per bu. Bags **20c** each extra.

Bokhara or Sweet Clover.

We are the largest dealers in this important Clover in the world and have our own machinery for hulling and proper cleaning. It is most suitable for almost any and all classes of soil and especially desirable on loamy, sandy or alluvial soils. Formerly it was used mostly for waste lands but many prominent stock raisers are using it extensively for both pasturage and hay, in many cases abandoning Alfalfa and substituting Sweet Clover.

Sweet Clover is of vigorous growth and withstands extremes of heat and cold as the tap roots penetrate the soil very deeply and it does well on both barren hillside as well as bottom lands. Matures early. Can be cut two or three times in a season; has a delightful and sweet scented odor and the blossoms are particularlay attractive to bees.

We offer below 3 classes:

WHITE SWEET CLOVER—A Biennial growing 5 to 6 ft. high having white blossoms borne in large panicles and extermely sweet scented. Reseeds itself if undisturbed or not cut in bloom.

Hulled seed (cleaned seed) requires 12 to 15 lbs. per acre. Per lb., **25c;** per bu. (60 lbs.), **$14.25.** Bags **20c** extra.

Unhulled (seed in the rough), per lb., **20c;** per bu., (30 lbs.), **$5.50.** Bags **20c** extra.

YELLOW SWEET CLOVER—A Perennial not quite so tall growing as the White but more desirable for pasture as the life season is much longer, producing an abundant yield of forage. Unhulled seed, per lb., **20c;** per bu. (30 lbs.), **$5.50.** Bags **20c** extra.

ANNUAL YELLOW SWEET CLOVER—A variety indigenous to western states, grows similar to the Perennial and Biennial varieties. Sown in many sections for innoculation and pastures. Cleaned seed per lb., **10c;** per bu. (60 lbs.), **$4.75.** Bags, **20c** each extra.

JAPAN CLOVER.

This has been widely used throughout the southern states and east of the Mississippi River and in many places now grows indigenously. It affords splendid pasture, grows very thickly and is particularly adapted to waste lands and woodland pastures and it succeeds fairly well on poor soils. When once established it spreads rapidly and usurps other wild growths, in many cases even subduing Broomsedge. It is not regarded as a pest as it can be readily gotten rid of by plowing it up and acts as an excellent fertilizer to the soil.

In the South, Japan Clover makes failry good hay and is extensively used in some sections for this purpose. It is nutritious, fattening, and readily eaten by cattle.

To obtain a good stand it is only necessary to scatter the seed broad cast in the spring during March, April or May at the rate of 10 to 12 lbs. per acre. If the land can be harrowed over before sowing it is of course better but this is not absolutely necessary. Per lb., **25c;** bu. (25 lbs.) **$4.75;** 5 bus. and over, **$4.50.** Bags **20c** each extra.

WHITE CLOVER.

Well known and indigenous to most soils throughout this section. It is largely used for lawns and pastures, producing very quick growth and covering the soil with a bright, vivid green very thickly. Particularly suited to sandy soils and in some localities where grasses do not grow well.

Requires 3 to 4 lbs. per acre alone or in mixtures 1 to 2 lbs. **J. C. McC. Best Grade**, per lb., **50c;** 5 lbs. and over, **45c.**

Crimson or Scarlet Clover.

This is used for fall sowing only but as it is so valuable a crop we cannot refrain from recommenidng it in highest terms and strongly urge that all farmers use it to the fullest extent possible. It makes a fair hay crop; is one of the most valuable of fall, winter and early spring grazing crops, one of the finest of all for cutting for green food when in bloom, and the most valuable of all crops for turning under as an improver to the soil. A good crop of Crimson Clover plowed under is equal in value to 20 tons of stable manure per acre.

The Eastern States have long recognized the value of Crimson Clover and have used it most extensively. In this section spasmodic sowings have been made, many of which were not of good quality seed and there has been some dissatisfaction. This is largely true because the average farmer did not understand the crop, but more largely on account of the soil not being inoculated with the proper bacteria for its growth.

It is sown from 12 to 20 lbs. per acre and covered very lightly or probably the best covering is with a heavy roller. It is sometimes used for sowing in corn after the last working and this is providing the corn is not too rank. Succeeds on almost any soil and if once used will continue to be a splendid crop.

J. C. McC. Best—Per lb., **15c;** bu. (60 lbs.), **$6.75;** bags, **20c** each extra. Price fluctuates. Ask for special prices.

Legume Inoculation for Crimson Clover acre size **50c;** 5 acres, **2.50c.**

ALFALFA OR LUCERN.

This has been grown extensively in the West and used quite generally in nearly all sections of the United States. There is no perennial crop which yields as many cuttings per acre not is as valuable and profitable to farmers and stock raisers. It will suit any soil that is not water sogged and that is moderately loamy and moderately deep top soil. Clay soils or soils having a very thin top soil are not suitable for Alfalfa because the roots penetrate to great depths, bringing up moisture, so that after once established, no amount of droughts or heat will kill it. It can be cut in this section 4 to 5 times a year and in Southern States even more crops are secured. It makes the finest hay and is largely used for poultry being cut up and sold as Alfalfa Chop and Meal.

Alfalfa is one of the oldest crops in civilization. It was introduced into Greece by the Persians with the invasion of Xerxes' Army. Pliny highly recommended it and it has been used in this country since 1820.

There is no trick in getting a good stand of Alfalfa if ordinary conditions prevail and certain processes pursued. If the land is not high in lime and application of this should be put on because Alfalfa roots analyze about 60% of lime showing that it absorbs large quantities of this; then if lime is present in the soil it will be **alkaline** instead of **acid** which is necessary for Alfalfa or any other legumes.

Another most important thing is that Alfalfa seed should be inoculated with legume inoculation and we believe that this will be beneficial in almost 9 cases out of 10.

To produce the best crops nodules in abundance should grow on the roots. In most cases there is not sufficient and at the price that legume inoculation can be now obtained, we strongly advise inoculation of seed before sowing.

It requires 20 to 25 lbs. of seed per acre which can be sown in March, April or the 1st of May or from the end of July to the 1st of October. If land is clean, spring sowing is preferable but if foul, fall sowing is best. Land should be deeply plowed, harrowed and then raked as fine and smooth as possible. The seed is then sown and covered very lightly with a smoothing harrow and rolled.

ALFALFA OR LUCERN

We offer two classes of seed as below both of which are choicest quality. As we are among the largest handlers of Alfalfa Seed in the central west we can supply any quantity or quality at the very lowest market prices.

J. C. McC. Best American Seed—Per lb., **25c;** bu., (60 lbs.), **$10.25;** 5 bus. and over, **$10.15.**

Best Imported Seed—Per lb., **20c;** bu. (60 lbs.), **$9.50;** 5 bus. and over, **$9.40.** Bags **20c** each extra. Price fluctuates. Ask for special quotations.

LEGUME INOCULATION FOR ALFALFA—**50c** per acre; 5 acres, **50c.** 25 acres, **$22.50.**

J. C. McC. SPECIAL GRASS AND CLOVER SEED MIXTURES.

J. C. McC. SPECIAL MIXTURES FOR GOLF COURSES, POLO GROUNDS, ATHLETIC COURSES AND LAWNS.

We supply in this vicinity nearly all of the cemeteries, public parks, golf courses and other places where considerable quantities of grass seed are used and are prepared to make very reasonable prices for highest quality stocks for golf courses or lawn purposes.

We put up special mixtures for all purposes and will be very glad to estimate on any special mixture that may be required.

We offer the following splendid mixtures which can be relied on to be the very highest quality of stocks and prices are very reasonable.

GOLF COURSE MIXTURES.

It is of course most important that the best seeds be used for this and in proper proportions to produce desired results. New golf courses require somewhat different mixtures from that of old courses because it is imperative in most cases that quick sod should be obtained and one which will be lasting and produce good, green, smooth turf. Our long experience with grasses, we are better posted on the requirements for the average golf course golf course than most of the so called specialists. The fact that we are among the largest importers of grass seeds and one of the largest cleaners of domestic sorts, enables us to offer at very reasonable figures.

J. C. McC. PUTTING GREEN MIXTURE—Composed of short, fine grasses which make smooth, even putting greens. Should be sown 100 lbs. per acre on new grounds or for renovating, the amount should be according to stand of grass.

Per bu. (16 lbs.), **$3.50;** 5 bus. and over, **$3.25.**

FAIR GREEN MIXTURE (For old courses.)—Composed of the best and most permanent grasses which produce short, green, thick turf, not in clumps but of spreading habit. It is the best mixture that is offered in this country.

Bu. (20 lbs.), **$3.00;** 10 bus. and over, **$2.85** per bu. Requires 30 to 40 lbs. per acre according to the stand of grass already on the ground.

J. C. McC. FAIR GREEN MIXTURE (For new courses)—This is composed of grasses which will afford a quick, serviceable turf in a short time. We have sold it for some courses which were sown as late as April 15th and obtained such a good stand in a short time that the club opened and the ground played on July 4th. It will give the very best results in after years. Of course, the course if used too recently after grass is sown will not be in the finest condition but sufficiently good to satisfy players.

Per bu. (20 lbs.), **$3.00;** 10 bus. and over, **$2.85** per bu.

For a new course, it requires 4 to 6 bus. per acre according to results desired. If for quick results, thick seeding is best.

SEED CORN.

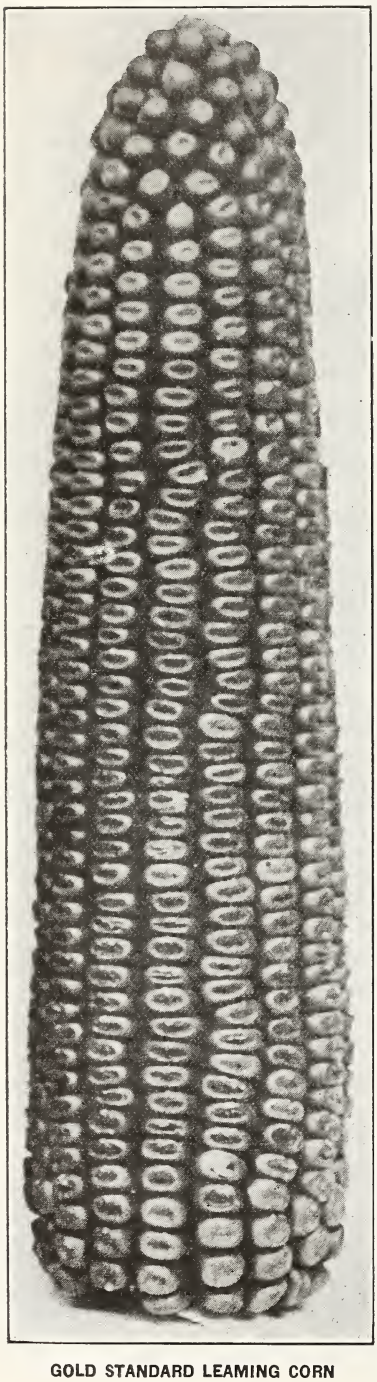
Our stocks of this are mostly from Ohio, grown by good growers. Most of them are what might be termed Commercial Seed Corns and some of the stocks we have are specially graded, tipped and butted.

All of the stocks, however, can be relied on to be very selected ears and high bred types.

Our Seed Corns are put up in white, seamless sacks, holding 2½ bus. Price **20c** each, extra.

Postage on Quarts 10c extra if by mail.

PERUVIAN GUANO—Will give excellent results on corn producing very early crops and largely increasing the yield. It can be applied either in drills or broadcast at fron 100 to 200 lbs. per acre. Price per 100 lbs. **$3.25;** bag (200 lbs.) **$6.00;** ton **$55.00.**



GOLD STANDARD LEAMING CORN

WHITE VARIETIES.

EARLY NORTHERN WHITE FIELD—A particularly desirable sort for very early planting or very late planting as it matures its crop in about 90 days. The ears are 8 to 9 inches long, of 16 to 18 rows which are well filled. Grains moderate, white, dented.

This is largely planted in many sections for green table corn as it produces 2 good ears to the stalk and is profitable. It is a good yielding corn and can be highly recommended for general purposes and early planting. Qt., **15c;** pk., **65c;** bu., **$2.50;** sacks **20c** each extra. Special prices in large lots.

CHAMPION WHITE PEARL—A splendid sort which will ripen in 90 to 100 days from planting. The ears are of good size, corn is fairly productive and it is one of the most popular sorts throughout northern sections and the west. Qt., **10c;** pk., **50c;** bu., **$1.56;** 5 bus. and over, **$1.40;** bags holding 2½ bus. **20c** each extra.

IOWA SILVER MINE—A very popular sort throughout all the corn growing section. Ears 9 to 10 inches long, 18 to 20 rows, grains fairly deep, cob small. This is a splendid sort for market, stock feeders or general growing. Qt., **10c;** pk., **50c;** bu., **$1.50;** 5 bus. and over, **$1.40;** bags **20c** each extra.

HICKORY KING CORN—An old favorite sort which is well known in all localities. The ears are rather small but as they are borne 2 to 3 on a stalk it is a fairly good yielder. It has the largest grains and the smallest cob of any white corn ever introduced. So large are the grains that is an ear is broken off and the grain laid over the cob it will almost cover it. It is particularly fine quality and universally satisfactory. Qt., **15c;** pk., **50c;** bu., **$1.75;** 5 bus. and over, **$1.50;** bags **20c** each extra.

SWEET FODDER CORN—For forage purposes, as it is the best of all corns both as green corn for ensilage or to be cut and used dry. Both the stalks and fodder contain large amounts of saccharine matter which is both fattening and relished by stock. It is sown in drills 2½ to 3 ft. apart and requires 1 bu. to 1½ bus. per acre. Pk., **60c;** bu. **$2.00.**

YELLOW VARIETIES OF SEED CORN.

GOLD STANDARD LEAMING—An ideal feeder's corn of light, golden color; ears slightly tapering and cylindrical. They grow 8 to 10 inches long, 7 to 8 inches in circumference and are well filled at the ends. The ears are from 16 to 22 rows, there being little space between them. The cob is red, moderate size and the percentage of corn to cob varies from 86 to 90%. The percent of protein which the grains contain, is more than any other corn that we know of and 4 bushels of Gold Standard Leaming will put as much fat on a hog or steer as 5 bushels of ordinary corn. On account of its splendid yielding qualities and moderate sized ears, it is one of the most popular of all yellow sorts with stock raisers and will suit the average farmer as well as any sort.

Our stock is all fire dried, shelled, tipped and butted. Qt., **10c;** pk., **50c;** bu., **$1.75;** 5 bus. and over, **$1.65;** bags **20c** each extra.

EARLY BUTLER—One of the earliest of all of the Yellow Corns, producing moderate sized ears of bright yellow color. The grains are long, and deep; cob, red and small. It is of strong growth, is very productive and will give good results for an early sort. Qt., **10c;** pk., **50c;** bu., **$1.50;** 5 bus. and over, **$1.40;** bags **20c** each extra.

GOLDEN BEAUTY—A late maturing yellow variety with long, slender ears and flat grains, usually 16 to 18 on the cob. It is very large yielding and very popular. Grains are not quite so flinty as Leaming nor quite so deep. Ears are moderate size but very long and average 9 to 11 inches. The yield of this crop is very large and it can be relied on as one of the best of all for late or main crop purposes, especially for shelling Qt., **10c;** pk., **50c;** bu., **$1.60;** 5 bus. and over, **$1.50;** bags **20c** each extra.

SEED CORN.

Yellow Varieties—Cont'd.

If quarts are to be sent by mail, add 10c for postage.

PRIDE OF THE NORTH—An extra early variety producing larger ears than Early Butler and just a trifle later. The grains are deep, narrow and set close on the cob. Ears, moderate length 8 to 9 inches long, usually 2 on the stalk. On account of its quick maturing and exceptionally fine yielding qualities, it is especially popular in northern sections for a quick maturing sort or for very early or very late planting in this section. Our stock of this is select, fire dried, butted and tipped. Qt., **10c;** pk., **50c;** bu., **$1.75;** 5 bus. and over, **$1.65;** bags **20c** each extra.

CLARK'S MASTODON—One of the largest of all yellow Corns producing exceedingly large ears, often measuring 9 inches in circumference. The grains are moderately long, cob fairly large but the yield is exceptionally large. It is a very popular Yellow sort throughout the main corn growing section of Ohio on account of its enormous yield. Stalks are strong, usually bearing 2 ears. Qt., **10c;** pk., **50c;** bu., **$1.50;** 5 bus. and over, **$1.40;** bags **20c** each extra.

IOWA GOLD MINE—An early yellow sort having good sized ears. It originated in the West where it is very popular and east of the Mississippi has found high favor among most growers. Grains are golden yellow, very deep, set on small cobs and an ideal sort for bottom lands or where there is trouble with curing because it dries out easily and quickly without molding. Qt., **10c;** pk., **50c;** bu., **$1.50;** 5 bus. and over, **$1.40;** bags **20c** each extra.

SEED OATS.

We are very large handlers of these and always sell the most select stocks which have been carefully recleaned on our own mills. Do not compare our prices on Seed Oats with the ordinary commercial feeding oats which are so often sold for seeding purposes.

WINTER TURF OATS—These are far superior to spring oats in quality and if sown early in the spring will yield a larger and better crop. In good land they grow 4 to 5 ft. high, producing not only the best quality of feeding oats but better and more palatable straw for stock. The grain is very heavy, often a measured bushel weighs 40 to 42 lbs. Very thin husks, the grain or meat being very full and heavy. Requires 1½ to 2 bus. per acre. Per bu., **85c;** 10 bus. and over, **83c;** bags included. Special prices in large lots.

WHITE SPRING OATS—Carefully selected stock thoroughly recleaned on our own mills. Per bu., **70c;** 10 bus., **68c;** bags included.

BLACK SPRING OATS—These usually do better on moderate land or thin land as they grow taller and yield a little better. They make more forage than spring oats and are better to cut green. Bu., **60c;** 10 bus., **68c;** bags included.

WINTER TURF OATS

DWARF ESSEX RAPE.

A splendid crop for summer forage for cattle, sheep and hogs affording in from 6 to 8 weeks an excellent pasture besides being a splendid soil improver. Rape has long been recognized as one of the best forage crops. It is used in Europe in immense quantities and is becoming more popular in this country every year on account of its high feeding value and fattening qualities for sheep, calves and swine. It grows well on almost any class of soil and can be grazed 6 weeks from sowing but does not make hay.

Sow 6 to 8 lbs. per acre broadcast in the spring or August and September. Lb., **15c;** 10 lbs., **12c;** 25 lbs., and over, **10c** per lb.; 100 lbs. and over, **$9.00.** Price fluctuates. Bags **20c** each extra.

CANADA FIELD PEAS.

These are entirely distinct from the Cow Pea; in fact, are a species of garden peas which are used for field culture. They can be sown as early as the state of the ground will permit and are usually put in with oats which help to hold them up so that the crop can be cut well. They produce the later part of May or the 1st of June, an excellent and nutritious crop of fine hay which is readily eaten by all classes of cattle and stock and which is very nutritious and fattening.

Sow 1½ to 2 bus. per acre with about 2 to 3 pks. of oats. Price fluctuates. Present price: bu., about **$3.00.** In small quantities: qt., **15c;** pk., **90c.** Seamless sacks **20c** each extra.

MAMMOTH RUSSIAN SUNFLOWER.

A profitable crop largely grown in this and many other sections for poultry feed. Unfortunately many of the Sunflower producing sections are affected with a fly which stings the seed in blossom, producing weevil which cut holes in the seed and ruin it. On this account it is very desirable that new sections for growing Sunflower be found and we would like to correspond with farmers who would undertake to grow this crop on contract.

Sunflower is particularly adapted to good, rich, soil, and alluvial bottoms, (not overflowed), will grow it successfully. The yield is from 800 to twelve hundred lbs. per acre which sells at from 3 to 4c per lb. according to the demand. Indications are that fair prices will prevail next season on account of the war cutting off the Russian supply. This year prices are higher than usual.

Culture—Plant from the end of April to the 1st of June in rows 3½ ft. apart, dropping 2 seeds 15 inches apart. Cultivate as for corn. When ready to harvest the heads are cut and flailed after being thoroughly dried. Requires about 1 pk. per acre.

Lb., **15c;** 5 lbs., **60c;** bu. (24 lbs.) about **$2.40.**

COW PEAS.

The Great Soil Improving Crop.

It is very hard at this time to tell at what prices Cow Peas will rule. Reports from various growing sections are very conflicting, some maintaining good crops and other short crops.

The increased demand for this wonderful summer crop, which is so largely used for hay, soil improving and ensilage, keeps up the price and the production of seed does not keep pace with the demand.

Culture—Cow Peas should be sown in May, June or July at the rate of one to one and a half bus. per acre either broadcasted or in grain drill. They should not be sown too early; otherwise, will not germinate—hence, land should be warm and the weather settled before they are put in.

Prices given below are approximate only and are subject to market changes. Current quotations will be made at any time.

WHIPPOORWILL—One of the earliest varieties with brown speckled seed which grows in bush form. It is a favorite sort in the West and North on account of its early maturity and ease of cutting and harvesting. Price about **$2.50** per bu. In small quantities. Pkt. **10c**, postpaid; qt. **15c**, postpaid **25c**; pk. **75c**.

BLACK—A little later and more trailing than Whippoorwill and produces more growth of foliage. It is better as a soil improver than Whippoorwills and in this section will make a larger yield of peas. Is especially valuable for hay or silage and the seed does not suffer from weathering like Brown or Yellow seeded sorts. Price **$2.50** per bu. In small quantities: Pkt. **10c**, postpaid; qt. **15c**, postpaid **25c**; pk. **75c**.

NEW ERA—In comparison with other sorts we consider New Era one of the very best as it produces an abundant growth of vine and exceedingly large quantity of pods and matures earlier than other sorts. Reports of 40 bus. per acre have been made us and the peas, while smaller than Black or Whippoorwills are fully as nutritious. Seeds are dull, lead-colored and require less per acre than other sorts. Price about **$2.50** per bu. In small quantities: Pkt. **10c**, postpaid; qt. **15c**, postpaid **25c**; pk. **75c**.

CLAY—Similar in growth to the Black, excepting the vines are a little more trailing. Color of the seed a very light brown. A popular sort in Tennessee and further south for all purposes. Bu. about **$2.50.** In small quantities, pkt. postpaid **10c**; qt. **15c**, postpaid **25c**. Peck **75c**.

BLUE WHIPPOORWILL—Peas drab color with blue spots; larger than ordinary Whippoorwills. Vines more trailing. A popular sort in the South. Price about **$2.50** per bu. In small quantities: Pkt. **10c**, postpaid; qt. **15c**, postpaid **25c**; pk. **75c**.

MIXED COW PEAS—A mixture of Clays, Whippoorwills, Blacks, etc., which are somewhat lower in price than the straight sorts and they are just as satisfactory for soiling or hay. Price about **$2.35** per bu.

BLACK EYE PEAS—One of the most popular and profitable of Cow Peas and very much esteemed in the Southeast and South as a table vegetable. Peas are white with distinct black eye. (For culture see under Peanuts.) ½ pt. **10c** postpaid; qt. **25c**, postpaid **30c**; 4 qts. **75c**; bu. about **$4.00.** Price fluctuates.

LEGUME BACTERIA FOR COW PEAS.—We have had this specially prepared and offer it at reasonable prices. It is of prime importance that seed be inoculated before planting for the largest crops. Price, acre size bottles, **50c**; 5 acres, **$2.50**; 25 acres, **$12.00.**

SOY OR SOJA BEANS.

ONE OF THE BEST OF SOIL IMPROVING, HAY AND FORAGE CROPS.

These have great drought resisting qualities and produce immense quantities of nutritious food and can be grown successfully in all sections even in places where Cow Peas are not successful. The comparative value of Soy Beans as against Cow Peas is comprehensively stated in a bulletin sent out by the Tennessee Experiment Station, summary of which is as follows:

Soy Beans maintain an upright habit of growth, while most Cow Peas make a tangled growth, difficult to harvest. Soy beans can be planted both earlier and later than Cow peas, as they stand more cold, furnishing 4 to 6 weeks earlier pasturage and later feed. Mammoth Yellow Soy Beans planted June 17th yielded 28.4 bushels per acre; on June 29th, 26.6 bushels per acre. Whippoorwill Peas planted same date yielded 27.7 and 18.8 bushels respectively.

In wet seasons Cow peas make almost all vine and few peas, while Soy Beans are more reliable under all circumstances.

The seed is not attacked by weevils, or other insects, as is the case with Cow Peas, and they can be threshed with common wheat thresher, adjusted, while Cow Peas require special machinery. Soy Beans ripen together so when cut with a mower nearly the total yield is obtained by threshing, but Cow Peas ripen unevenly, and the total yield can be obtained only by expensive hand-picking.

QUANTITIES TO THE ACRE—Soy Beans are planted in rows 2½ ft. apart, ½ bushel per acre, or for drilling broadcast, 1½ bushels per acre. Sow in May, June or July, moderately early planting on Soy Beans being better.

Prices on Soy Beans fluctuates like those of Cow Peas and the figures given below are approximate only. Special current prices on request.

MEDIUM GREEN—A popular sort in this and more northern sections producing moderate growth of vine and maturing beans very early. It yields well and is especially valuable for very early sowing or late seeding. Price about **$2.50** per bu. In small quantities: large pkt. **10c**; qt. **15c**, postpaid **25c**; pk. **75c**.

ITO SAN—One of the earliest of all Soy Beans having light yellow seed. Vines small; beans borne in dense clusters. A popular sort in northern sections on account of its quick maturity. Price about **$3.25** per bu. In small quantities: large pkt. **10c**; qt. **20c**, postpaid **30c**; pk. **$1.00**.

MAMMOTH YELLOW SOY BEANS—The most largely grown variety and especially popular in the South where it yields enormous quantities of beans. Beans are large, oval, yellow, excellent quality; vines tall producing an immense amount of foliage and beans. This is by far the best and largest yielding sort provided it can be so sown early but it takes a full season to mature in this locality. Price about **$2.00** per bu. In small quantities: large pkt. **10c**, postpaid. qt. **15c**, postpaid **25c**; pk. **65c**.

BLACK BEAUTY—A small seeded early sort which is very prolific and makes excellent hay. Especially adapted to northern sections or for late planting. Price about **$3.00** bu. In small quantities; large packet **10c**, qt. **20c**, postpaid **30c**, pk. **$1.00.**

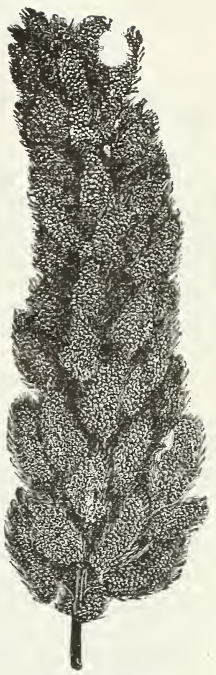
BLACK NUTTALL—A large black seeded variety, similar in growth to Mammoth Yellow, but somewhat earlier. It is a new sort and has become very popular where used. Produces good yield both for forage and beans. About **$3.00** per Bu. In small quantities; large packet **10c**, qt. **20c**, postpaid **30c**, pk. **$1.00.**

EARLY BROWN—Seed about the size of the Mammoth Yellow; crop being produced earlier. It does not grow so tall, nor make as large yield of either forage or beans as the Mammoth Yellow. About **$3.00** per bu. In small quantities; large packet **10c**, qt. **20c**, postpaid **30c**, pk. **$1.00**

INOCULATING SOY BEANS—It is of utmost importance that Soy Bean seeds be inoculated before planting as if put on land which does not contain bacteria the yield will be disappointing; while on the other hand, inoculation, even on land where there are some bacteria, is usually most beneficial in a large majority of cases.

Price of Legume Inoculation for Soy Beans, per acre, 50c; 5 acres, $2.50; 25 acres, $12.00.

Millet.



GERMAN MILLET

Largely used as a summer hay crop and particularly adapted for rich or bottom soils; also very useful for cleaning rich, foul lands of weeds as its quick, abundant, luxuriant growth smothers most weeds.

Price fluctuates. Below we give January 1st quotations. Ask for current prices.

GERMAN MILLET (Choice Tennessee Cultivated)—The most popular of Millets and if properly grown makes large and excellent crops of nutritious hay. It should be sown thickly and cut when the heads are in bloom and if for hay never allowed to get old or seed to form as this causes a great drain on the soil, besides materially injuring the quality of the hay.

Tennessee Cultivated Millet is far superior to the common Western stocks. It will produce large crops of hay in 6 to 8 weeks from sowing.

Sow 1 bu. per acre in May, June or July. Two crops can be seeded on the same land a year if desired.

Price (January 1st), J. C. McC. Tennessee Grown Cultivated German Millet, pk., **60c;** bu., about **$2.00.** 2½ bu. bags, **20c** extra. Current quotations on request.

Hungarian—Specially adapted to rich or alluvial soil. It makes a finer quality of hay than Millet on very rich soil as it does not grow so coarsely nor yield so largely. Cut at the right time, which is in bloom, and cured properly it makes as nutritious hay as timothy; is especially popular with dairymen.

Sow from ¾ to 1 bu. per acre in May, June or July. Price, pk., **50c;** bu. about **$1.75.** 2½ bu. bags **20c** extra. Current prices on request.

Pearl or Cat Tail Millet (Pencillaria)—This has been highly extolled by many flamboyant catalogues and sold at fabulous prices. It makes a splendid and continuous cutting forage crop, used for green food or hay; producing enormously and yielding 4 to 5 cuttings per season. Valuable both for green food and hay, being very nutritious. After the first cutting it stools enormously and later cuttings are even larger than the first.

Culture—Sow in May in rows 3 ft. apart at the rate of 4 to 5 lbs. per acre and cultivate like corn.

Large pkt., **10c** postpaid; lb., **15c,** postpaid; 10 lbs. and over, **12c** per lb., 100 lbs. and over, **$10.00.** Bags **20c** each extra.

SORGHUM OR CANE.

A very popular crop in Kentucky, Tennessee and Western states, producing excellent and nutritious food for all kinds of stock.

Culture—Sow in May, June or July, either in drills 3 ft. apart at the rate of about 1 pk. per acre or broadcast 1 to 1½ bus. per acre. Cut after seed has matured.

Early Amber—A favorite sort in Northern and many Western states. It yields one or two cuttings and the saccharine contained is large. Grows 10 to 12 ft. high. Lb., **10c,** postpaid **15c;** pk., **50c;** bu. (50 lbs.) about **$1.25.** Bags included. Price fluctuates.

Red Top or Imphee—A favorite sort in Kentucky and Tennessee and one of the best varieties for general purposes both for stock feeding or making syrup. It is of moderate height. Seed is produced in close head. Lb., **10c,** postpaid **15c;** pk., **50c;** bu. (50 lbs.) about **$1.25.** Sacks included. Current prices on request.

Early Orange—Similar in growth to Amber except that the head is more spreading. A favorite sort in Southern and Western states where it produces large crops. Lb., **10c,** postpaid **15c;** pk., **50c;** bu. (50 lbs.) about **$1.25.** Bags included. Current prices on request.

TEOSINTE

A wonderfully luxuriant, quick growing forage crop which yields 3 or 4 cuttings of fine, nutritious fodder similar to corn fodder. It is extremely popular in Southern states and one of the most profitable crops which can be sown in this section. The foliage is easily cured and resembles corn fodder but more nutritious.

Sow in May in drills 3 to 3½ ft. apart at the rate of 3 to 4 lbs. per acre. Oz **10c;** ¼lb. **20c;** lb. **40c;** 5 lbs. and over **35c** per lb.

KAFFIR CORN.

A favorite grain crop in the West growing similar to Sorghum. Foliage and stalks, however, do not contain saccharine matter—hence, are not so valuable for feeding but the enormus yield of grain makes it very profitable. The grain is very largely used for poultry and stock feeding, containing a high percentage of starch. Lb. **10c,** postpaid **15c;** pk., **40c;** bu. (50 lbs.) about **$1.00.** Bags included.

BUCKWHEAT

A splendid soil improving crop for very poor land besides being largely grown for grain in northern and mountainous sections. It is also largely used for bees. The yield of grain is from 15 to 25 bus. per acre which can be ground into buckwheat flour or makes a splendid feed for poultry or hogs, being extremely fattening.

Culture—Sow in June, July or August at the rate of ¾ of a bu. to 1 bu. per acre broadcast, covering with a smoothing harrow. It does not mature its grain until the cool nights—hence, too early sowing is not desirable.

Japanese—This produces the largest yield of finest and largest kernel buckwheat. Superior to all other sorts. Pk. **50c;** bu. about **$1.25;** bags 20c each extra.

Silver Hull—Much improved over the common Buckwheat. Grains, however, smaller than Japanese but yielding abundantly. Pkt. **50c;** bu., about **$1.25,** bags **20c** each extra.

SUDAN GRASS.

A Wonderful New Grass Yielding Immense Quantities of Hay and Especially Valuable for Central and Southern States.

Sudan Grass though of comparatively recent introduction into the United States has spread like wildfire over many sections. It produces an immense yield of hay which is nutritious and can be cut twice in a season. In appearance it resembles Johnson Grass; grows when broad-casted 3 to 5 ft. high, of if cultivated 6 to 10 ft. high, but is more nutritious than Johnson Grass, containing larger amounts of protein and fattening qualitites. Its principal value is that it is adapted to almost any kind of soil and succeeds in nearly all climates, but produces the largest yield in warm and temperate latitudes, where there is an abundance of rain-fall. It does not blight, cures easily, is greatly relished by stock and can be easily grown if sown either broadcast or in drills. After the first cutting it stools enormously, and as many as a hundred stalks sometimes come from a single root. After frost Sudan Grass is killed, and entirely unlike Johnson Grass it can be easily gotten rid of, as the winter destroys it entirely.

Its yield of hay is briefly given in various sections.

In South Dakota and Minnesota 4¾ to 5 tons. Colorado and northern Texas 1½ to 2¾ tons. Maryland and Virginia 2½ to 2¾ tons. Southern states 2 to 5½ tons. When irrigated the yield compares favorably with Alfalfa. At Chico, California, under irrigation 9 tons of Sudan Grass against 8 tons of Alfalfa. At Bard, California, 8 tons of Sudan Grass against 7 9/10 tons of Alfalfa.

Sudan Grass produces large quantities of seed, bearing according to the section of the country and season from 500 to 2250 lbs. per acre.

CULTURE—Sudan Grass can be sown either in drills 2½ to 3 feet apart at the rate of 2 to 3 lbs. to the acre, and cultivated like corn, or broadcast 15 to 25 lbs. per acre. Seed should be sown about the time of planting corn and the hay cut when the grass is headed out, with a mower or binder. Early cutting is desirable as the hay is more nutritious and gives the grass a better chance for large succeeding crops.

PRICES—Per lb., 50c; 5 lbs. or over, 45c per lb.
Special prices in large lots.

BROOM CORN.

This is usually a profitable crop and sometimes enormously profitable. The price of Broom Corn varies from $50.00 to as much as $200.00 per ton. A fair yield is a ton to 3 or 4 acres of ground and the seed is valuable for stock and poultry food in addition to the returns from the broom straw.

Culture—Sow in drills 3 ft. apart at the rate of 3 to 5 lbs. per acre, thinning out stalks up about 70 to the rod. Cultivate as for corn. Rich land requires thicker seeding and more stalks than medium or poor soil. Cut when the seed is in the milk state.

Oklahoma Dwarf—A favorite sort in the Southwest on account of its earliness, dwarf habit, robust growth, extreme productiveness and long well fibred brush. It averages 5 ft. high and has great drought resisting qualities. Seed can be allowed to ripen without danger to the brush and stalks make excellent fodder which are relished by stock. On account of its large yielding, moderate height and general good qualities it is positively the best of all for Southern states. Pkt. **10c** postpaid; lb. **15c**, postpaid **20c**; 5 lbs. and over, **50c** per lb. Bu. (45 lbs.) **$2.75.** Bags included.

Improved Evergreen—A favorite sort in the middle West producing long, straight straw of greenish appearance after being cut which commands the highest price. Pkt. **10c**, postpaid; lb. **15c**, postpaid **20c**; 5 lbs. and over, **15c** per lb.; bu. (45 lbs.) **$2.50**; bags included.

VELVET BEANS.

A very popular crop of the extreme Southern states on account of its tremendous growth of vine. In ordinary season, even in this latitude it will grow 40 ft. long; consequently, is a tremendous soil improving crop. As the vines, however, attain such great length they are hard to handle unless with a cutter on the plow. They do not mature seed except in extreme Southern states.

Plant in May or June, 1½ pks. per acre, in drills 5 ft. apart. Price about **$3.75** per bu. In small quanties: large pkt., **10c**, postpaid; qt., **20c**, postpaid **30c**; pk., **$1.00.** Bags extra **20c.** Current quotations on request.

WHITE NAVY OR PEA BEANS.

A profitable crop which is usually planted in rows 3 ft. apart, dropping 2 or 3 beans together a foot apart in the rows. Price about **$4.00** per bu. In small quantities: large pkt., **10c** postpaid; qt., **20c**, postpaid; 4 qts., **65c.** Price fluctuates. Seamless bags about **20c** each extra.

VETCH.

We offer two sorts as below:

Hairy or Sand (Vicia Villosa)—Recommended for fall sowing, only. Present price per lb., **15c.** Bu. of 60 lbs., **$7.25.**

Spring Vetch (Vicia Sativa)—This is used in the North and in some other sections for sowing with Oats for producing a spring crop of hay. Especially popular in the northern Pacific States and European countries. Per lb., **10c**; 3 lbs. for **25c**; bu. of 60 lbs., **$3.50.**

MISCELLANEOUS, BIRD AND SUNDRY SEEDS.

Five Cents per Pound Extra, if Sent by Mail.

	Per lb.
Black Locust	$0.40
Honey Locust	.40
Castor Beans	.20
Canary Seed (2 lbs. 25¢)	.15
Mixed Bird Seed	.10
Caraway Seed	.15
Celery Seed, for flavoring	.40
Fennel Seed	.30
Flax Seed (3 lbs. 25¢)	.10
Flax Seed, crushed	.10
Hemp Seed (3 lbs. 25¢)	.10
Lettuce Seed, for birds	$0.20
Maw or Poppy Seed	.20
Millet,	.05
Mustard Seed, white, for pickles	.15
Mustard Seed, black	.15
Osage Orange	.40
Pumpkin Seed (10 lb. at 18c)	.25
Rape Seed	.10
Sunflower Seed	.10
Water Melon Seed for tea	.20

GRASS SEED MIXTURES.

We prepare for many customers special mixtures of grass and clover seeds for certain soils and will cheerfully give information on this subject when so requested. Our price on these will be about the same as the market price on grass seed as we do not charge for mixing or bagging.

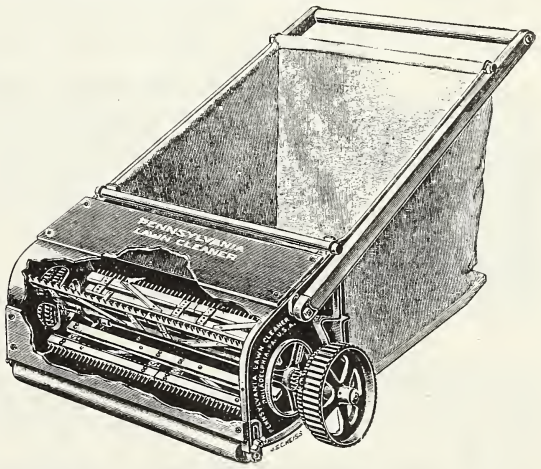
These Mixtures will be put up for various purposes and customers are requested to state whether they are preferred for pastures or for hay mainly; pasturing a secondary consideration. They are put up for the following classes of soil:

No. 1—Light, sandy, loamy soil.
No. 2—Limestone, stiff or loamy, upland soil.
No. 3—For heavy, loamy or clay bottoms.
No. 4—For wet bottom lands subject to overflow.
No. 5—Especially for the South for withstanding hot, dry weather.
No. 6—For pasture, when on loamy or heavy soil.
Write for prices stating quantities desired.

LAWN CLEANER AND SWEEPER (Pennsylvania)—Cleans lawns of leaves, trash, clippings, etc., faster and better than four men can do it with rakes, etc. It also straightens up the grass and trailing plants upright, so that they can be cut with a mower. Will handle the heaviest fall of leaves easily. The machine is 24 inches wide. Made in a substantial manner, combining lightness with strength and durability. Guaranteed to do satisfactory work.....**Price, $16.00**

PEACH PITS

We have for years made the handling of peach pits a specialty, annually securing our stocks from districts entirely free from the yellows and are prepared to furnish the best. Prices furnished on application.



BIRDS AND THEIR CARE.

We list below artistic and comfortable homes for birds. If more attention were paid to the protection of our native birds there would be far less serious trouble from Scale, Beetles, Caterpillars and other insects which are so destructive to vegetation and especially our trees and shrubs. Then the delight from the songs and chirping of these bird-neighbors will add a wonderful and pleasing charm to the home.

These bird houses and hutlets are artistically constructed. The habits of the birds have been studied and the birds take to them readily. We strongly urge that one or more of these be erected on each suburban and country place.

BIRD HOUSES, TRAPS, ETC.

Martins.
Martins one hour after erecting.

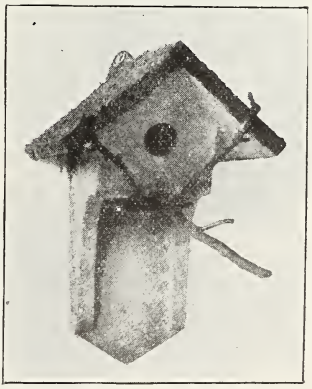
BIRD HOUSES—These houses are constructed of a tinted stucco, which is indestructible and will last a life time. Instructions for placing on each hut. Help protect and multiply our native birds. They will repay in song and chirp, add attractiveness and enliven grounds, besides destroying countless worms, bugs, beetles and grasshoppers which devour vegatation.

PRICE LIST HUTS AND CABINS.

Wren Hutlet	$1.25 each
Chickadee Hutlet	1.25 "
Bluebird Hut	1.50 "
Titmouse	1.50 "
Bark Hut	2.00 "
Woodpecker and Flicker Hut	1.50 "
Carved and Hewn Huts	$5.00 to 25.00 "
Squirrel Cabins	4.00 to 10.00 "

Prices for Log cabins and Summer houses, Etc., on request.

SPARROW TRAPS—The English Sparrow is universally conceded to be a pest, driving away our native birds, besides being noisy, filthy and destructive. Sparrow traps eliminate them sometimes 75 to 100 per day. **Price, each $5.00.**

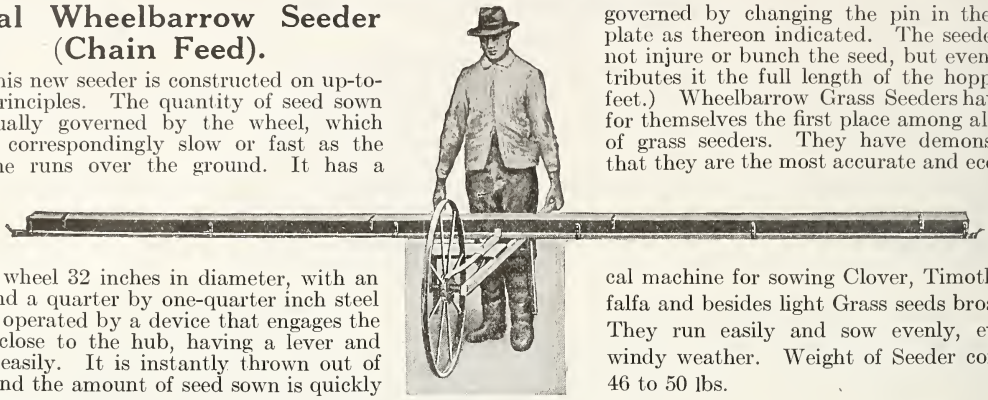


Wren Hutlet.

CLOVER SEED, GRASS AND GRAIN SEEDERS.

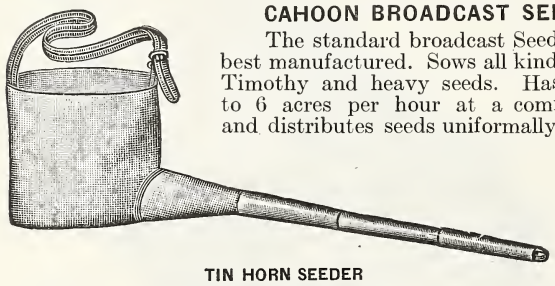
Royal Wheelbarrow Seeder (Chain Feed).

This new seeder is constructed on up-to-date principles. The quantity of seed sown is actually governed by the wheel, which moves correspondingly slow or fast as the machine runs over the ground. It has a strong wheel 32 inches in diameter, with an inch and a quarter by one-quarter inch steel tire, is operated by a device that engages the wheel close to the hub, having a lever and works easily. It is instantly thrown out of gear, and the amount of seed sown is quickly governed by changing the pin in the index plate as thereon indicated. The seeder does not injure or bunch the seed, but evenly distributes it the full length of the hopper (14 feet.) Wheelbarrow Grass Seeders have won for themselves the first place among all kinds of grass seeders. They have demonstrated that they are the most accurate and economical machine for sowing Clover, Timothy, Alfalfa and besides light Grass seeds broadcast. They run easily and sow evenly, even in windy weather. Weight of Seeder complete 46 to 50 lbs.



Plain Seeder—Sows small seed like Clover, Timothy, and other seeds. Price, **$7.00.**

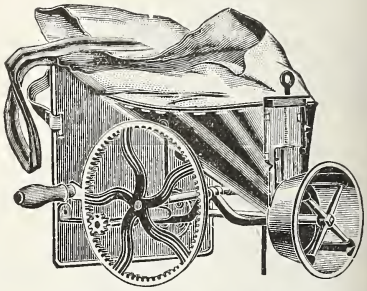
Combined Seeder—Sows small seed like Clover, Timothy, etc., as well as light seeds such as Orchard Grass, Blue Grass, etc. **$8.00.**



TIN HORN SEEDER

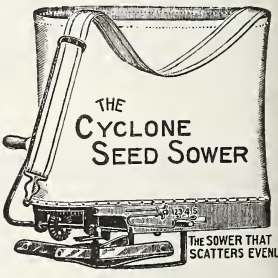
CAHOON BROADCAST SEED SOWER.

The standard broadcast Seeder and one of the best manufactured. Sows all kinds of grain, Clover, Timothy and heavy seeds. Has a capacity of 4 to 6 acres per hour at a common walking gait and distributes seeds uniformally in about one-fifth the time required by hand. Very simple in operation and easy to adjust for quantity. Price, **$3.00.**



CAHOON BROADCAST SEEDER

TIN HORN SEEDER—A light, accurate Seeder which will broadcast clean seed from 30 to 40 ft. Length of the tube when extended is 30 inches. Good grade of heavy ducking is used on the sack. Weight only 12 ounces. Price, **75c.**



CYCLONE BROADCAST SEEDER—A geared machine which works with a crank and which has given good satisfaction. It is strongly built, good material; has 4 inch throat and cannot be choked even with strawy oats. Adapted for all kinds of clean heavy grain and Clover seed. Price, **$1.40.**

RITTENHOUSE SEEDER—Formerly sold under the name of "The Little Giant" A general seeder, which has four pressed tin flanges and distributing wheel under the bottom; gearing wheel centered, making it easy to run. Has an accurate gauge. Sloping feed board and force-feed steel frame. This is one of the most widely used types. The sack holds one-half bushel; convenient hand hold and body shield. The machine is well braced. Price, **$1.50.**

FIDDLE BOW SEED SOWER—A popular sort in many sections. It is well known and well adapted to sow grain and heavy seed. Price, **$1.00.**

RITTENHOUSE MOLE TRAP.

The simplest, safest and surest mole trap ever invented. Self-setting. No danger of its going off unless the trigger is touched. Made of all steel and tinned. The spears are spring steel, therefore not have to be as long as soft steel. Price, **50c.**

NITRAGIN.

A Pure Culture put up in Granular Form for Inoculation of all Legumes.

This is one of the simplest, safest and surest methods of inoculating soil for legumes. It is put up under a German process by the Armour Fertilizer Works of Chicago, and is claimed to be the best method of preserving the bacteria for legume inoculation. Each can is stamped with the date of the Culture and guaranteed for 6 months.

Nitragin is prepared for all legumes, viz:— Clover, Alfalfa, Vetches, Cow Peas, Soy Beans, Garden Peas, Garden Beans, etc. Nitragin has been on the market for a number of years and has given good satisfaction. An average result of 1000 experiments with it in various locations show it has extensively increased crops of legumes in some cases as much as 150%. It is put up in round cans with a perforated top, to allow the bacteria air and the cultures are to be mixed with the seed after slightly moistening.

PRICES—1 acre size can $2.00, 5 acre size $9.00. Descriptive circular giving full information mailed free on request.

FERTILIZERS.

Peruvian Guano.

A natural product obtained from the piling up of carcasses of birds together with their droppings which has been accumulating in a dry climate on the Pacific Coast for ages. It contains a very high percentage of plant food, and is especially rich in Nitrogen and Phosphoric Acid. The plant food is of quick and available form, and as it contains no Sulphuric acid to make the Phosphoric acid soluble is much superior to the ordinary commercial fertilizers for agricultural crops and the most superior of all for gardens, lawns and flowers.

Guaranteed Analysis as follows:

Ammonia.....	4 to 5%
Phosphoric Acid (Soluble).	8 to 10%
" " (Reverted)	6 to 8%
" " Total....	14 to 16%
Potash (K_2O).....	2%

DIRECTIONS.

Peruvian Guano can be used either broadcast or in drills, mixing slightly with the soil.

FOR GARDENS — For Vegetables or Flowers in beds, apply Peruvian Guano at the rate of 300 to 400 lbs. per acre if broadcast, 200 or 300 lbs. per acre if in drills mixing with the soil. On Small Plots, 1 lb. to 80 ft. of surface, (8 x 10 feet) if broadcast, or it can be applied around plants a little heavier than this, not too close. If in drills; 1 lb. to about 75 ft. of drill, mixing with the soil.

FOR TREES, SHRUBS, ETC. — Apply heavily broadcast and, when possible, work into the soil.

FOR LAWNS — As a top dressing. For old lawns, apply broadcast at the rate of 1 lb. to 100 sq. ft. two to three hundred pounds per acre. For new lawns, apply broadcast at the rate of 1 lb. to 75 sq. ft. four to six hundred lbs. per acre. Work into the soil with a rake or harrow before the seed is sown.

FOR HOUSE PLANTS— To a 6 inch pot use about ½ teaspoonful on the surface of the soil. For larger or smaller pots use in proportion. Stir the fertilizer into the soil and water as usual. In solution, dissolve at the rate of a heaping teaspoonful in half a gallon of water or 1 lb. to 20 gallons of water. Apply to the soil and not on the plant.

No commercial fertilizer will give better satisfaction for general crops, such as Wheat, Corn, Oats, Tobacco, Potatoes and Truck crops. It can be used at from 100 to 500 lbs., per acre; either in drills or broadcast when the crop is put in. It also gives excellent results as a top dressing for grass fields if applied in the spring after the growing season has commenced, say the end of March.

PRICES. In small quantities, ½ lb. **10c;** lb. **15c;** 5 lbs., for **50c;** 25 lbs. **$1.50. In large quantities;** 100 lbs. **$3.25;** 200 lbs., **$6.00;** Ton **$55.00.**

PULVERIZED SHEEP MANURE.

Wizard Brand.

This is a pure natural manure and one of the most nutritious foods for plants. Its effect is immediate. It is very rich, safe and gives quick results. It will give excellent results on flower beds, lawns or in vegetable gardens, as it contains all the elements for promoting a quick, luxuriant growth, as well as adding body to the plant. Can be used either in dry form or dissolved to make a liquid manure. If applied dry, no raking off is required as it does not disfigure the grounds, nor does it contain seeds of foul weeds, nor offensive odor.

WIZARD BRAND SHEEP MANURE—is especially desirable for lawns, producing a quick luxuriant growth of rich, green color, that will enable the grass to withstand the heat and drought of summer.

DIRECTIONS. For Lawns, apply broadcast at the rate of four to six hundred lbs. per acre in February, March or April in spring, or in September or October in the fall. For **pot plants** mix one part of sheep manure to six parts of soil. For **use in the vegetable garden** apply either broadcast and rake in or in drills and mix slightly with the soil. **For liquid application** use 1 lb to 5 gallons of water.

PRICES.—2 lbs, for **10c;** 6 lbs. for **25c;** 10 lbs., **35c;** 50 lbs., **$1.00;** 100 lbs., **$1.75;** ton **$27.50.**

OTHER FERTILIZERS.

EXCELSIOR PLANT FOOD: (Odorless)—For house plants. Can be applied either dry or dissolved in water. Small size **10c;** large size **20c.**

HARD WOOD ASHES—Supplies a large amount of Potash in most available form. Beneficial to all garden and field crops, and especially for grasses and Clover. Apply 1 to 2 tons per acre broadcast. Per 100 lbs., **$1.35;** bbl., (about 200 lbs.,) **$2.00;** 10 bbls., **$17.50.**

PURE BONE MEAL—Finely pulverized and excellent for grain and grass crops and lawns, also one of the best fertilizers for roses, shrubs, trees, grapes, etc. It is of permanent and lasting effect. Also excellent for mixing with potting soil. 5 lbs., **25c;** 10 lbs., **40c;** 35 lbs., **$1.00;** 50 lbs., **$1.35;** Per bag (125 lbs.,) **$2.50;** ton **$35.00.**

BONE PHOSPHATE—This contains a high percentage of Phosphoric acid, combined with ammonia and potash and will give excellent results on spring crops especially vegetables, corn and potatoes. It is also splendid for wheat or grain crops. Bag (125 lbs.) **$1.75;** ton **$25.00.**

LAND PLASTER—Valuable for top dressing clover fields, or for applying on piles of stable manure, or mixing with this material, as it retains and attracts ammonia. Valuable also for mixing with Paris Green or other Insecticides, for dusting plants to prevent insect ravages. 10 lbs., **10c;** bag, (200 lbs.,) **$1.40;** 5 bags (1,000 lbs.,) **$6.00;** ton **$11.00.**

THE STANDARD INOCULATION

FARMOGERM

High-Bred Nitrogen-Gathering Bacteria for Clovers, Alfalfa, Beans, and Other Legumes

Farmogerm is a pure culture, or growth, of nitrogen fixing bacteria, that have been selected and bred up to transform large amounts of nitrogen from the air into soluble nitrates. These bacteria are grown in a jelly, or food, in which they remain active for long periods of time, and sent out in a bottle which admits the necessary supply of pure air, yet keeps out destructive contaminations. If Alfalfa can be grown on hot, sandy land of South New Jersey, why can't you grow it.

Unless the soil is very acid or wet, Farmogerm will:

..—Increase the yield and quality of legume crops, giving quicker growth and earlier maturity.

..—Increase the food-value of legumes.

..—Make legumes grow in new localities where they cannot otherwise be grown successfully.

..—Supply nitrates to other crops growing with the inoculated legume crop.

..—Enrich the soil for future crops, thereby increasing the permanent value of the farm. Better crops—better soil—less fertilizer—less labor.

Farmogerm is put up for all Legumes such as Alfalfa, Red, Alsike and Crimson Clover, Soy Beans, Cow Peas, Vetch, Peas, Beans and Sweet Peas.

FARMOGERM has been used extensively in all parts of the United States and has received endorsements from many prominent Agriculturists and Specialists all over this country.

INOCULATION CULTURES have been on the market for many years. A great many of them have not been successful because of lack of knowledge in keeping the bacteria alive. The success of Farmogerm is due to its scientifically prepared media for preserving the life of the bacteria, together with a sufficient quantity of air being allowed to preserve them. Further, the bacteria are kept alive and in a state in which they are active when applied to the crop. Farmogerm, like other inoculating material, if desired, can be applied to the crop while growing.

PRICES—Garden size, ¼ acre, 50c; 1 acre, $2.00; 5 acre size, $6.00.

Descriptive circular on request.

STANDARD LEGUME INOCULATION

50c per Acre.

We offer this year **STANDARD LEGUME INOCULATION** prepared especially for us, which is a pure bred culture and produces results equal to any Inoculation on the market, at the reasonable price of 50c per acre. Standard Inoculation is put up in bottles having especially constructed stoppers which furnish the bacteria with a continual supply of air, keeping them strong and active until used. It is delivered ready to use by diluting with a little water and sprinkling on the seed. Seed for ten acres can be thoroughly inoculated in ten minutes.

"The peculiar value of legumes for maintaining and increasing the fertility of soils is due to certain bacteria which develop nodules upon the roots of leguminous plants and which have the unique power of rendering the free nitrogen of the atmosphere available for plant growth. Without these bacteria, legumes, like other crops, exhaust the soil of its combined nitrogen."

Ext. Farmers' Bulletin No. 315.

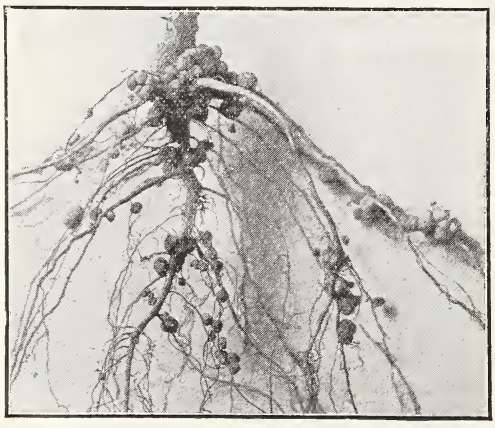
This Inoculation is prepared for all Legume crops in 5 acre, 1 acre and small trial 25c bottles. Some of them are put up as Combination Cultures, having proper bacteria for several kinds of Clovers, so that it is not always necessary to buy separate Cultures for each kind of seed being planted. The principal crops for which we have had this prepared are as follows:

ALFALFA ROOT SHOWING NODULES

Alfalfa
Red Clover
Mammoth Clover
Alsike Clover
White Clover
Crimson Clover
Sweet Clover
Vetches
Garden Peas
Garden Beans
Cow Peas
Soja or Soy Beans
Canada Field Peas
Sweet Peas

ALFALFA CAN BE SUCCESSFULLY GROWN on some part of nearly every farm by sowing good seed, thoroughly inoculated just before planting, in a properly prepared seed bed on land having good drainage. Alfalfa must have the proper bacteria to produce best results. The peculiar value of legumes for maintaining and increasing the fertility of soils is due to certain bacteria which develop nodules upon the roots of leguminous plants and which have the unique power of rendering the free nitrogen of the atmosphere available for plant growth. Without these bacteria, legumes, like other crops, exhaust the soil of its combined nitrogen.

TO GROW GOOD CROPS FEED THE SOIL—Grow inoculated legume crops which make available plant food of greater value than they remove. Inoculated clovers, alfalfa, vetch, peas, beans, cow peas, soy beans and other legume crops enrich the soil with nitrogen and organic matter—the two most necessary elements required to grow good crops. By growing these inoculated crops, sufficient nitrogen is placed in the soil for all crops.



SOJA BEAN ROOT SHOWING NODULES

Corn, cotton, potatoes, orchards and all cultivated crops are very hard on soils, but if some inoculated legume crops, such as crimson clover, or a mixture of winter vetch and rye or winter oats are sowed between the rows at last cultivation and turned under for green manure quantities of plant food are made available and soil fertility is maintained and often increased.

PURE CULTURE METHOD CHEAPEST AND MOST EFFICIENT. All legumes grown either for the purpose of enriching the soil or for the crop must, in order to be of the greatest benefit to the land and the plants be provided with nitrogen fixing bacteria. It is believed that the artificial culture is the method most efficient, cheapest and most free from objectionable qualities.

PRICES.

Small Size, ... **25c**
One Acre Size **50c**
25 Acres for **$22.50**

SPRAY CALENDAR.

We give below in comprehensive form, the principal Insect pests and Remedies together with those for Fungus Diseases for trees, plants and shrubs.

Insects are of two kin t . Biting and Sucking. The first eat the leaves and plants and can be generally controlled by poisons, such as arsenicals. The Sucking insects can only be destroyed through certain poisons or oils which are absorbed through their breathing pores.

Arsenate of Lead is best to apply for the following Biting Insects and should be used 2 or 3 lbs. to 50 gal. of water; viz:—

Asparagus Beetles, Bean Beetles, Canker Worm, Caterpillar, Codlin Moth, Curculio, Flea Beetle, Cherry Fruit-Fly, Currant Worm, Grasshopper, Locust and Tomato Worm.

PARIS GREEN is better to apply either dry or sprayed on Potato Bugs and Tobacco Worms.

HELLEBORE is best applied on vegetables that are to be eaten, such as for **Lettuce-leaf worm, Currant worm** and **Cabbage worm,**

SUCKING INSECTS—**Kerosene Emulsion** or **Fish Oil Soap** 20 to 30 parts of water is effective on **Aphis** and some scale insects, **Cabbage flea beetle, Chinchbug, Bark lice, etc. Lime-Sulphur Solution** is the most effective remedy for scale. Scalecide and some Miscible Oils are also used for these pests. **Lemon Oil Insecticide** is excellent for small gardens and sepecially on house plants

ANTS—These can be destroyed with Bi-sulphide of Carbon Carbon poured into their holes. Take a sharp stick and drive down about 6 inches, pouring in a table-spoonful of the liquid, then close the hole with sticky clay.

APHIS—These are green and black flies which suck the juiecs out of plants and are very troublesome in the garden on roses, chrysamthemums, asters and many other plants. **Black Lice** are nearly akin to them. Both can be destroyed with Tobacco solution, Kerosene or Fish Oil Solution. For small quantities of plants or in the house or garden use Lemon Oil Insectcide

APPLE—For Scale use Lime-Sulphur Solution. In winter or while trees are dormant, one gal. to 9 or 10 gals of water. If badly infested apply twice. To prevent **Apple Scab** and for destroying Codlin Moth, Curculio, Borers and Canker-Worm spray with Lime Sulphur Solution one gal to 40 gals of water or with Bordeaux Mixture, adding 2 to 3 lbs. of arsenate of lead to each 50 gals. of solution. Apply just before the bloom opens. For **Codlin Moth** spray just after the bloom has fallen with Lime Sulphur Solution or Bordeaux Mixture with addition of arsenate of lead as above. The moth lays eggs in the bud of the apple which are hatched into worms and penetrate to the core-hence, thorough spraying to fill the small cups is desirable. There are two broods of Codlin Moth, the second 40 to 50 days after the first—hence, a second spraying will be necessary.

To prevent **Bitter Rot** and **Black Rot** spray with Lime-Sulphur Solution, one gal. to 40 gals. of water or with Bordeaux Mixture, one gal. to 50 gals of water.

ASTERS—For **Black Bug** which eats the flowers use Paris Green 1 lb. to 150 Gals. of water or Hellebore in water.

BEAN LEAF BEETLES. Spray with Arsenate of Lead, 2 lbs. to 50 gals. of water.

BLACKBERRIES—For **Anthracnose and Rust.** Cut out and burn any diseased cane spraying with Lime-Sulphur 1 to 40 gals. or with Bordeaux Mixture one gal. to 50 gals of water.

CHERRY—Forbes or Cherry Scale. Spray with Lime-Sulphur in the fall and winter, 1 to 10 gals of water. For Brown Rot spray with Lime-Sulphur after leaves are out, 1 gal. to 40, adding 2 lbs. arsenate of lead. To poison **Curculios** and **Cherry Fruit-Fly,** spray again about 10 days after fruit is set. For **Slugs** which often eat the surface of the leaves in June, spray the trees with arsenate of lead, 2 or 3 lbs. to 50 gals of water.

CHRYSANTHEMUM. Aphis—Dust with fine tobacco Dust or or make a solution with coarse tobacco Dust and spray. For **Blight** use Bordeaux Mixture.

CURRANT. Leaf-Blight—Use Bordeaux Mixture, 6 qts. to 50 gals. of water; after fruit is harvested, spray again. For the **Green Currant Worm:** dust with Hellibore. **Borers:** cut out and burn infested stems early in the spring.

CUT WORMS. To prevent. For a few plants wrap the stems with paper when setting. For large quantities dip the stems in a 5**W** Arsenate of Lead solution. **To Destroy.** Mix ¼ lb. Paris Green, one pound of wheat bran and **W** lb. brown sugar and apply a small quantity around plants.

GOOSEBERRY. Mildew—Before buds break, spray with Bordeaux Mixture 3 qts. to 50 gals. of water. **For Worms:** dust with Hellebore.

GRAPES—In the spring gather and burn all dead wood and dried fruit of the previous season. Spray with Bordeaux Mixture 6 to 8 qts. to 50 gals. of water as the buds are swelling. Spray again 10 days later. After the fruit is set spray with Bordeaux or dust with sulphur every 2 or 3 weeks until fruit is nearly grown.

MAPLE. Caterpiliar—Collect and burn egg rings in fall and winter if practical and spray arsenate of lead after the first leaves appear. Burn out all tent caterpillars with a torch. Put sticky bands around trees to prevent ascent of caterpillar. Bore and insert wires in holes and kill or inject Bi-sulphide of Carbon and close with putty or sticky clay.

MOLES—These carnivorous animals live on worms, grubs and bugs. As they have a very short alimantory canal they have to keep moving to prevent starvation. Small pieces of fresh liver poisoned with arsenic and placed in the runs will kill them. Or if the center of their radiating runs can be located inject Bisulphide of Carbon.

MOTHS—The adult stage of most worms and caterpillars . Most of them are attracted to lights at night. (See White Grubs). Bands of Tree Sticky prevent the Caterpillars climbing trees. Arsenate of Lead destroys them on foliage.

SHADE TREES—For **Scale Insects.** Spray in the fall or winter while trees are dormant, Lime-Sulphur Solution, 1 gal. to 9 or 10 gals. of water. For **Fungus Diseases:** In the spring and summer, use Lime-Sulphur, 1 gal. to 40 gals. of water or Bordeaux Mixture, 3 qts. to 50 gals of water. Arsenate of lead, 2 or 3 lbs. to 50 gals. solution should be added for various Leaf-Eating Insects.

For **Borers:** use a wire and poke into the holes or inject Bisulphide of Carbon in the holes and stop up with mud or putty so that the fumes will destroy them. Spray or wash also with Fish Oil Soap, occasionally allowing some of the liquid to run to the base of the trees.

HARDY SHRUBS—Where affected with Blight use Bordeaux Mixture 2 or 3 times in the spring. For **Leaf-eating Insects** arsenate of lead 2 or 3 lbs. to 50 gals of water. For **Scale:** Lime-Sulphur Solution applied in the fall or winter while shrubs are dormant, 1 gal to 10 gals of water.

ONIONS. Maggots—Destroy plants affected as soon as noticed taking up the maggot with the roots. Rotate the onions. **Smut:** 1 lb. of Formaldehyde to 25 to 33 gals of water, applying with a sprinkler. It takes 500 to 700 gals. of solution per acre.

PEACH—APRICOT—PLUM.—For **Peach leaf-Curl.** Spray in the spring before the buds open using Lime-Sulphur 1 gal. to 15 gals of water. For **Brown Rot** and **Peach Scab:** spray 1 gal. of Lime-Sulphur to 75 gals. of water, applying before the bloom opens and again in 30 days, 1 to 75 gals of water.

PEAR. Blight—Cut out and burn all affected branches and twigs as soon as the blight appears. If possible cut about 6 inches below blighted part. For **Pear Scab** and **Codlin Moth:** spray as recommended under **Apple.**

POTATO—For **Potato Bug or Beetle** dust Paris Green with a Leggett Champion Paris Green Gun or mix 1 lb. of Paris Green and 50 to 100 lbs. of land plaster and sift on the vines; or use 1 lb of Paris Green to 100 gals. of water, sprayed. Repeat this as often as necessary or as the rains wash the arsenical off. For **Blight:** spray with Bordeaux Mixture. mix with the Green dry, or if sprayed, 1 gal. to 50 gals of water. This makes the vines healthy and vigorous, increasing the yield of potatoes; in some instances as much as 100**W**. **Scab:** Dip potatoes in a solution of Formaldehyde, (4 lbs of 40% of formaldehyde to 100 gals of water.) Dry throughly before cutting and planting.

QUINCE—For Blight. Cut out and burn affected parts. For Insect Diseases see under **Apple.**

ROSES. Leaf-Curl and **Blight**—Spray with Bordeaux Mixture Mixture. **Green-Fly** or **Aphis.** Use Arsenate of lead before the buds form or a tobacco solution or Lime-Sulphur Insectcide. For SLUGS: arsenate of lead or tobacco.

STRAWBERRIES. Leaf-Blight or **Mildew**—When the growth begins in the spring use Bordeaux Mixture, 8 lbs. to 50 gals of water. When the first fruits are set, repeat. After fruit is harvested, repeat every two weeks.

TOBACCO. Worms—Apply Paris Green dry with a Leggett Champion Paris Green Gun. When plants are small put 1 lb. to an acre. When larger 2 to 3 lbs per acre.

TOMATO. Leaf-Blight.—As soon as this disease is discovered, spray with Bordeaux Mixture and repeat every week or 10 days. **Rot.** Train the vines getting as much sun light as possible. Bordeaux Mixture usually prevents this. Sow seed at this time so as to have 2 or 3 plantings. Pick infested fruit.

VINES. Cucumber and **Melon**—For Striped Beetle, dust with Tobacco Dust or Slug-Shot.

WHITE GRUBS—These are the larvae of the June Bug and the Tumble Bug (or Beetle). In many instances they are very destructive to lawns and sod fields. They have a 3 year life cycle and move up and down in the soil from 3 inches to 36 inches in depth. If located at shallow depths injections of Bi-sulphide of Carbon or Benzine into the soil at two foot intervals, will be effective. Beetles can be caught in countless numbers at night by a lantern placed over a shallow pan or tub smeared over with Tangle Foot,tree stick.

Insecticides and Fungicides.

These can be sent only by Express or Freight.

CATALOGUES and **PAMPHLETS** further describing and giving fuller information for use of most Insecticides and Fungicides will be **MAILED FREE ON APPLICATION.**

If special information is desired not given here, write us or call at our store and we will cheerfully supply if within our power.

LIME-SULPHUR SOLUTION—This has been adopted as the Standard remedy by nearly all of the experimental stations and the U. S. Department of Agriculture for destroying San Jose, Oyster Shell Scale and similar insects as a winter spray while the trees are dormant. It is applied in diluted form of 1 gallon Lime Sulphur to 9 gallons of water. As a Summer spray it is to be diluted 1 to 40. It acts both as an insecticide and a fungicide, killing the spores of fungi, and a constant poison for sucking insects and mites.

Our Lime-Sulphur Solution is a clear cherry color, free from sediment and cannot clog the nozzles. It is very strong, testing 32% to 33% Baume. The value of Lime-Sulphur Solution as an Insecticide consists principally in the amount of Sulphureted Hydrogen gas that it gives off, and our solution is manufactured in the most highly concentrated form for effective results. Lime-Sulphur is being largely used as a Summer spray now, and is especially desirable as a mixture with Arsenate of Lead, the proportion usually being 1 gallon of Lime Sulphur and 2 lbs. of Arsenate of Lead to 40 gallons of water. Prices per qt., **25c**; ½ gal., **40c**; gal., **60c**; 5 gal., **$1.75**; ½ barrel (25 gal.), **$5.00.** Barrel (about 50 gal.), **$8.00.** Special prices in large lots.

PARIS GREEN—A strong and effective poison for potato bugs and other leaf-eating insects. Can be applied either dry or in a solution of water; if dry use Leggett's Dry Powder Gun or Beetle Duster (see implements); if diluted use one pound of Green to 100 to 200 gallons of water, or 1 lb. to 100 lbs. of Land Plaster. Paris Green acts a little quicker than Arsenate of Lead, but washes off more easily. It is better to use on garden crops or tobacco, and Arsenate of Lead is best for trees. Paris Green and Bordeaux Mixture give excellent results on potatoes, the Green killing the bugs and the Bordeaux preventing blight. Price fluctuantes **Present price:** ½ lb., **15c**; lb., **25c**; 5 lbs. at **20c**; 100 lbs. about **18c** per lb.

ARSENATE OF LEAD—One of the best and most effective of poisonous insecticides for leaf-eating insects, and more especially adapted to trees and shrubs, as it adheres to the foliage better. It is not so liable to be washed off by rains, and does not burn. We can supply Arsenate of Lead either in **paste form** to be diluted with water, 3 lbs. to 50 gallons, or in **dry form** for dusting or dissolving. The dry form is about twice as strong as the paste and sells at higher price. For tender plants use a weaker solution, say 2 to 50.

Paste Form Arsenate of Lead—1 lb., **20c**; 5 lbs., **15c** per lb.; 25 lbs., **13c** per lb.; 100 lbs. and over, **10c** per lb.

Dry Arsenate of Lead—1 lb., **30c**; 5 lbs., **25c** per lb.; 25 lbs., **22c** per lb.; 100 lbs., **20c** per lb.

Arsenate of Lead and Bordeaux Mixture—Is made by using with Arsenate of Lead (Paste) with Bordeaux Mixture (Paste,) Pt. **20c**; qt., **35c**; gal., **$1.00**; 5 gals., **$4.50**; ½ bbl. (25 gals.), **$15.00**; bbl. (50 gals.,) **$25.00.**

BORDEAUX MIXTURE—For blight, mildew and all fungous diseases. Can be used alone or in connection with Paris Green or Arsenate of Lead. For hardy foliage such as apple, pear, potato, tomato, egg plant, use 3 to 4 qts. in 50 gallons of water. For tender foliage such as peach, cherry and cucumber, 2 to 3 qts. in 50 gallons of water.

Bordeaux Mixture Paste—Pt., **15c**; qt., **25c**; gal., **85c**; 5 gals., **$4.25**; ½ bbl. (25 gals.) **$11.25**; bbl., (50 gals.,) **$20.00.**

Bordeaux Mixture Dry—Per lb., **25c**; 5 lbs., **85c**; 50 lbs., **$6.50**; 100 lbs., **$12.00.**

SCALECIDE (Pratts)—A preparation of micible oils for San Jose and other scale and some other insects. It mixes with cold water and stays mixed but does not form an emulsion. It is not as disagreeable to use as Lime Sulphur. As a Winter spray use a solution 1 part Scalecide to 15 to 20 parts of water when trees are dormant. For Summer spray, 1 part Scalecide to 25 to 30 parts of water. Prices, 1 gal., **$1.00**; 5 gal., **$3.25**; 30 gal., **$15.00**; barrel (5 gal.), **$25.00.**

WHITE HELLEBORE—For destroying Cabbage worms, Lettuce worms, Currant worms and other insects on vegetables, flowers and shrubs. It is not so poisonous as the Arsenicals, consequently better to use where these are to be eaten. It can be dusted on or made into a solution and sprayed. ½ lb., **15c**; lb., **25c.**

BUG DEATH—A non-poisonous preparation very effective on Rose-bushes, Grape-vines, house plants and vegetables. It is sure death to potato, squash and cucumber bugs, currant, gooseberry and tomato worms. It also prevents blight and can be used either dry or in water. It is not injurious and can be used freely in the dry form. Applied while the dew is on the plants as a powder, adheres better. If used as a wet spray, stir thoroughly 12 or 15 lbs. of Bug Death in 3 gals. of water, then pour the mixture into 60 gals of water. Lb., **15c**; 3 lbs., **35c**; 5 lbs., **50c.**

HAMMONDS SLUG SHOT—One of the best insecticides for Vegetables in use. Specially recommended for destroying the Cabbage worm, Potato Bug, Tobacco worm and other insects that prey on vegetables. Gardeners need have no fear about applying this, as it is not dangerous to handle like Paris Green, etc. Non-poisonous to human life. Price 1 lb. canister, **15c**; 5-lb., pkgs., **35c**; 10-lb. pkgs., **65c**; 100-lb. lots at 5½**c** per lb. Pamphlet containing full information mailed free.

KEROSENE EMULSION—For Cabbage worms, scale on trees, cut-worms, lice, rose-bugs and green fly and all sucking insects, either on plants or animals. Ready for use by simply adding water, 25 to 50 parts to one of Emulsion. Qt., **40c**; gal., **$1.00.**

LEMON OIL CO.'S STANDARD INSECTICIDE—The very best remedy for house plants, effectually destroying Green Fly, Red Spider, Scale, Mealy Bug, Mildew, etc. It has no bad odor, is easy to handle, being soluble in water, and can be applied to plants of most delicate foliage without danger. The "Lemon Oil" is a capital wash for dogs; it cures mange, destroys insects, and removes impurities from the hide. Will also destroy lice and insects by spraying in hen pens and poultry houses. Directions for use on each can. Price, ½ pt. tins, **25c**, by mail, **30c**; pt., **40c**; by mail, **60c**; qt., **75c**; ½ gal., **$1.25**; gal., **$2.00.**

FISH OIL SOAP—One of the best and safest remedies for Scale, sucking insects and plant lice on vegetables, shrubs and trees. Kills Aphis, Thrip, Melon-Lice and all insects sucking juices from trees. Is also effective for preventing and destroying Borers in trees as a wash. lb., **20c**; 5 lbs., **75c**; 50 lbs., and over, **10c** lb; bbl. (about 400 lbs.) **7½c** lb.

NICOFUME LIQUID—A highly concentrated extract of Tobacco, which can be used as a spray, or allowed to evaporate in green houses. It is one of the strongest solutions of tobacco made; contains about 40% Nicotine, which if sprayed, is to be diluted 1 part Nicofume to 50 parts of water. Prices, ¼ lb., **50c**; 1 lb., **$1.50**; 4 lbs., **$5.50**; 8 lbs., **$10.50.**

NIKOTEEN—A liquid extract of tobacco, for fumigating or spraying. Effective on green and black Fly, Thrip, Mealy Bug, Red Spider, etc. 30% Nicotine. Price 2 oz bottle, **40c**; ½ lb., **$1.00**; lb., **$1.50.**

SULPHO TOBACCO SOAP—An effective insecticide for sucking insects on both plants and animals. 3 oz. cake, **10c.**

SULPHUR—For applying dry in greenhouses or out of doors to prevent mildew. Prices, per lb. **10c**; 3 lbs., **25c.**

TOBACCO DUST—An effective remedy for Green Fly, and other Athis, Flees, Lice, etc., and drives off beetles from cucumber and melon vines. It also acts as a preventive and destroys insects in the ground around the roots.

Coarse—For making a solution of tobacco and for dusting in gardens. Per lb., **5c**; 5 lbs. for **20c**; 100 lbs., **$2.00.**

Fine—Extremely finely pulverized; for fumigating, and the best for dusting, also fine for dusting poultry. Per lb., **10c**; 5 lbs. for **40c**; 100 lbs., **$3.00.**

TOBACCO STEMS—Used for fumigating plants to kill insects. Invaluable as a mulch for rose beds, lettuce beds, etc., where insects frequently do much injury to roots and foliage. Bale of about 400 lbs., **$5.00.**

CONKEY'S FLY KNOCKER—One of the best sprays for protection of cattle, horses and stock against flies, gnats and other insects. It is not injurious to the hair. Very effective and remains on the animal as a preventative a long time. 1 qt., **35c**; ½ gal., **60c**; gallon, **$1.00.**

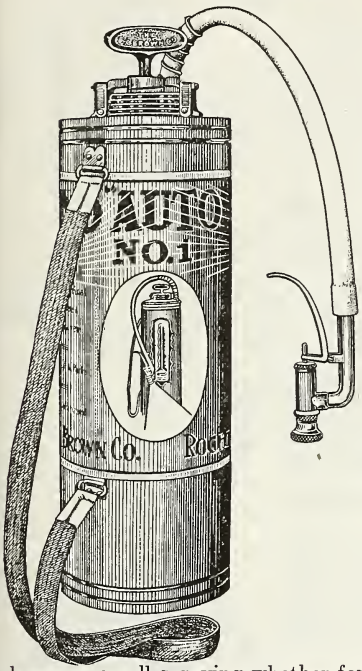
NOXICIDE—A soluble disinfectant, deodorant and germ destroyer; to be mixed with water and sprayed, for preventing mites, lice, cholera, poultry and stock diseases. It is to be used in poultry houses, horse stalls, and can also be used on the animal. Full directions on every can. 1 pt. size, **35c**; qt., **60c.**

TREE TANGLEFOOT—For protecting trees against climbing insect pests in a simple, economical and effective way; put a band of tree tangle-foot, from 3 to 5 inches wide completely around the tree. A perfect safe-guard against Gypsy, Brown-Tail and Tussock Moth, Canker Worms and Ants, and other creeping insects. 1 lb., **30c**; 3 lbs., **85c**; 10 lbs., **$2.65**; 20 lbs., **$4.80**; 25 lbs., **$6.00.**

WEED KILLER (Traget Brand)—A highly concentrated solution which dilutes one part to 50 parts of water. It is effective within 12 hours after application and one application will keep paths and roadways free from weeds for an entire season. 1 qt., **40c**; 1 gal., **$1.00**; 5 gal., **$4.00**; 10 gal., **$7.50.**

WAX, Grafting—¼lb., **10c**; ½lb., **15c**; 1lb., **25c.** (By mail add 10c per lb.)

SPRAYERS, Compressed Air and Knapsack.



AUTO SPRAY. A Self-Operating Automatic Sprayer.

One of the strongest and most simple in its parts. It does not have a screw cap but the top of the sprayer is put on with a cam which is easier, quicker and just as effective. The reservoir holds 4 gallons but should not be over two-thirds full of solution when ready for spraying. About two pumpings will empty the tank. It can be used in the garden for small trees and shrubs or for spraying weeds, cattle or whitewashing. The cylinders are made of both galvanized iron and brass with lock-seams. Can be carried in the hand or used as a knapsack sprayer. Two nozzles are supplied with each machine which throw a fine or coarse spray.

Equipment consists of two feet of half-inch hose, a fine sprayer nozzle, one solid steam cap and stop-cock for shutting off. A coarse, whitewash nozzle can be supplied extra if desired.

Other equipments are given below. Full directions with repair list and spray calendar go with each machine.

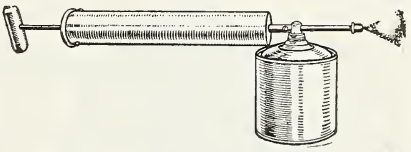
Auto Spray—No. 1-C. Galvanized steel with stop cock..... $4.50
Auto Spray—No. 1-A. Brass tank with stop cock..... 6.75
Auto Pop Attachments—For instantly shutting off the spray. Worked with the thumb and usually very desirable..... .50
Extension Pipe—2 ft. lengths for spraying tall shrubs, trees, etc. Solid Brass, each..... .40
Brass Strainer—For straining lumpy liquid. Each..... .90
Two Row Attachment—Each..... 1.50
Brass Elbow Extension—Each..... .25

CYCLONE SPRAYER.

This is the most satisfactory of all the atomizer sprayers we have ever seen. It is easily operated and throws a good spray; very useful for all classes or small spraying whether for vegetables, flowers or for spraying cattle or household uses. The reservoir holds 1 qt. and can be filled to capacity.

No. 1—All Tin..... $0.50
No. 4—All Brass..... 1.00

RED STAR CONTINUOUS SPRAYER.



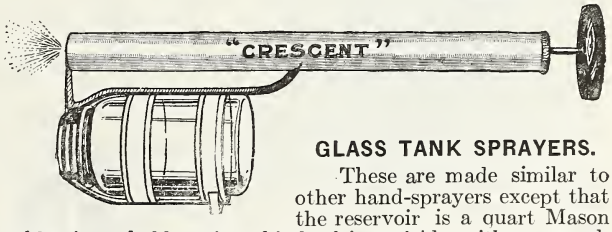
This gives a uniform and continuous spray on both the forward and backward stroke of the plunger. The straight tube and nozzle as well as the siphon tube, are all removable for the purpose of cleaning, also the brass ball check valve is easily accessible should the occasion require.

Can be used for insecticides, applying oil, disenfectants as well as regular spraying materials and gives a fine effective spray. Capacity 1 qt.

All Tin..... 75c

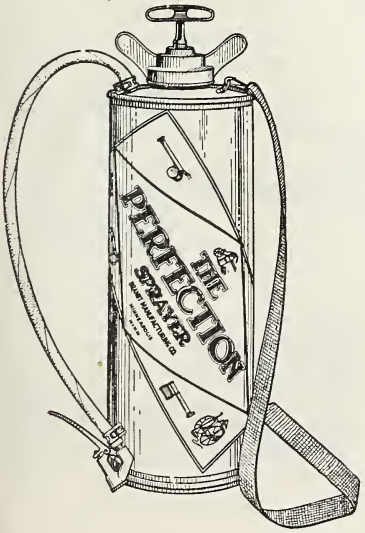
MIDGET SPRAYER.

A small hand-sprayer made of tin which holds one pint. It is 14 inches long, well made and suited to small spraying or for household use. Price, each..... 25c



GLASS TANK SPRAYERS.

These are made similar to other hand-sprayers except that the reservoir is a quart Mason jar which enables it to hold various kinds of insecticides without corroding out very fast. Then again as the fitting is universal, any quart jar can be used and if desired to save the solution in a jar, a new jar may be used for a new kind of liquid which at times is very desirable. The working parts are thoroughly satisfactory and it throws a good spray. Price, each..... 60c



"PERFECTION" SPRAYER.

A very strong and durable, high pressure type of compressed air sprayer. It is so constructed that every part is sufficiently strong to more than meet the demands made upon it. With these features, is combined ease of operation and general suitablity for the work for which it is intended. The pump is made of 1¾ inch seamless brass tubing with a brass valve and is sealed at the top of the tank with heavy threads. It is practically impossible to blow out this sprayer. The nozzle is automatic, operating very easily with a lever held in the hand. This sprayer will handle white-wash, Bordeaux Mixture, Paris Green, Arsenate of Lead and other spraying materials. This sprayer is guaranteed by the manufacturers to the extent that if for any reason it should prove unsatisfactory it may be returned and replaced with a new one or money will be refunded. It is made in two styles, galvanized tank, and all brass.

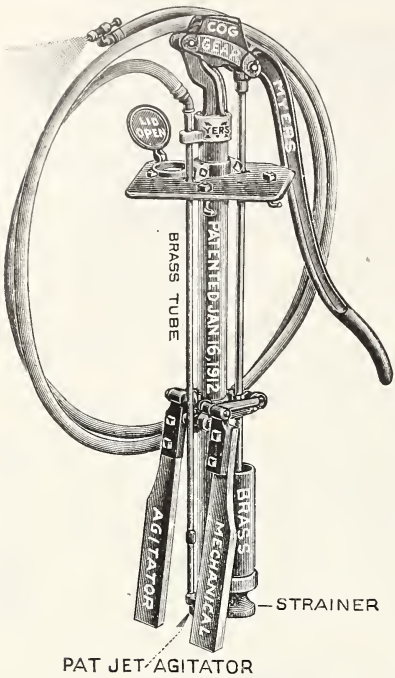
Galvanized tank Perfection Sprayer $4.50.
All brass Perfection Sprayer, $7.00.

Brass Spray Pumps.

These are the best equipped pumps made and are to be used in buckets, barrels, etc.

They are useful not only for Insecticides but whitewashing and pumping in small quantities.

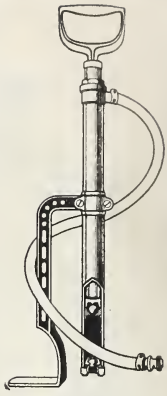
A complete catalog of these will be mailed on request. Those listed below will be found thoroughly satisfactory and our prices are much lower than the manufacturer's list prices.



PAT JET AGITATOR
COG GEAR No. 318-B

"MODOC" BUCKET PUMP.

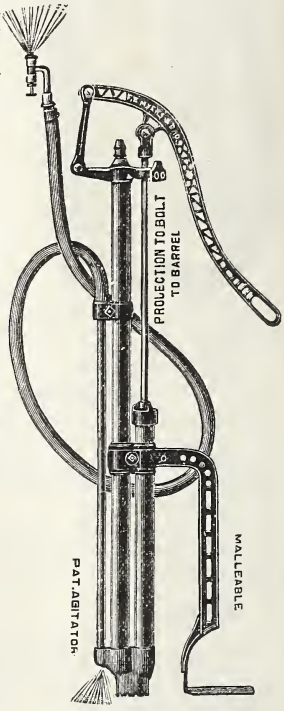
One of the best of the bucket pumps and more powerful than any of this style that we have seen. The cylinder or barrel is very large, made of extra seamless brass tubing which makes it of large capacity. The plunger is hollow and gives double action which insures a steady stream of liquid. The valves are bronze balls, plunger thick cotton wick and can be changed when necessary. A foot piece is firmly attached and the whole thing strongly made. Equipped with 3 ft. of ½ inch spray hose and a graduating nozzle for fine and coarse spray. Price..**$3.00.**



MODOC

MYER'S LEVER BUCKET SPRAY PUMP No. 324

A new pattern, 1¼ inch cylinder; can be used in a bucket or attached to the top of a barrel. Has Vermorel nozzle throwing fine or coarse spray and single stream. Patent agitator. Price...**$4.00.**



LEVER BUCKET No. 324

MYER'S COG-GEAR BARREL SPRAY PUMP No. 318-B.

This is one of the most powerful of all spray pumps. The construction is such that the entire pump sets inside of the barrel containing the liquid being bolted to the upper end. This insures all the working parts being entirely submerged, thereby avoiding losing priming and doing away with a suction pipe. The base fits into an 8 x 8½ inch hole. Has bronze ball valve and brass seat. The plunger has brass cylinder and discharge pipes are brass. Air chamber is 32 inches long and the pump will throw a uniform and constant spray. It has a good leverage and is very powerful. Easily operated.

Price with one lead of 15 ft. ½ inch, 5 ply discharge hose, graduating barrel nozzle and both jet and mechanical agitator...**$8.50**

MYER'S GENERAL PURPOSE SPRAYER AND WHITE WASHING PUMP.

The tank is made of heavy galvanized iron with a wide bottom so as to set steady. The cover is removable, is held securely in place by two thumb nuts one on each side, which holds the cover tight and prevents spilling or splashing of the liquid. Holds 7 gallons. The pump is similar to No. 324, and is fitted with Bordeaux nozzle, brass ball valves and has both jet and dasher agitator. Price with hose extension, pipe and extra white-wash nozzle, **$7.50.**

LITTLE GIANT SPRAY PUMP.

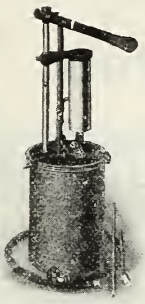
This is provided with a large air chamber. Plunger works straight up and down without lever Used for bucket only. Has agitator and equipped with hose and Imperial combination. Price..**$2.50**

HAND PORTABLE SPRAYER

MYER'S HAND PORTABLE SPRAYER.

With Cog Gear Spray Pump and Mechanical Agitator. Made of extra heavy Galvanized iron. Capacity 12½ gallons. Suitable for spraying trees, whitewashing, or cold water painting. This consists of a galvanized tank mounted between two handles and carried on a 16 inch steel wheel like a wheelbarrow. It is identical with Pump 318-B, and is equipped with mechanical agitator, 15 ft. of hose and an 8 ft. pipe extension in two 4 ft. parts, which adapts it for spraying large trees and also for use in whitewashing on the inside of low buildings. The tank is made of heavy galvanized iron thoroughly reinforced at top and bottom by steel bands. Price **$15.00.**

Paragon Sprayers



No. 0. PARAGON SPRAYER

PARAGON SPRAYERS consist of a simple and absolutely satisfactory pump, strongly mounted in a heavy reinforced galvanized iron tank, or in a barrel. The largest sizes have a wheel or truck so that they can be easily transported.

This machine is easily operated by one man, and can be brought in close proximity with the work, eliminating the use of a long expensive hose.

The nozzle makes a most beautiful mist-like spray and does not drip.

A heavy, steady pressure is easily attained, the air chamber being of sufficient size and strength and is made of seamless brass tubing. The reservoir is made of heavy sheet iron well galvanized. All essential fittings and valves are made of brass and are giving thorough satisfaction. The hose is 6-ply of best quality. The strainer is made of heavy perforated brass and is strong and durable. The pump frame is well ribbed to prevent breakage and is easily removed from tank for cleaning. By pumping water through machine after using, the entire mechanism is easily cleaned. Simplicity, durability and satisfaction are guaranteed, and thousands are now in use.

PARAGON SPRAYERS have self cleaning strainers and cannot clog the nozzle when spraying, as the agitator passes over it with each stroke of the pump dislodging any particles the suction may draw into its surface. They are the Sprayers adapted for spraying insecticides, whitewashing or applying cold water paint.

Every Paragon Sprayer is fully guaranteed and if any part proves defective, same will be immediately replaced free of charge.

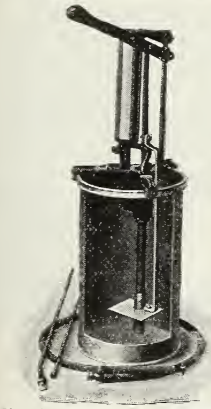
150 lbs. pressure is easily obtained with this Sprayer.

No. "0" Capacity 3 gallons—Equipment 4 ft. of 6-ply hose, 3 ft. spray pipe, 2 spray nozzles. Net price, **$7.50.**

No. "1" Capacity 6 gallons.—Equipment 5 ft. 6-ply hose, 5 ft. spray pipe, 2 nozzles. Net price, **$10.00.**

No. "3" Capacity 12 gallons.—Equipment 10 ft. 6-ply hose, 7½ ft. spray pipe, 2 spray nozzles. Net price complete, **$15.00.** Without truck, **$13.00.**

No. "4" Capacity 28 gallons.—Equipment 20 ft. 6-ply hose, 10 ft. spray pipe, 2 spray nozzles, net price complete with barrel, **$22.00.** Not mounted on wheels, price, **$17.00.**



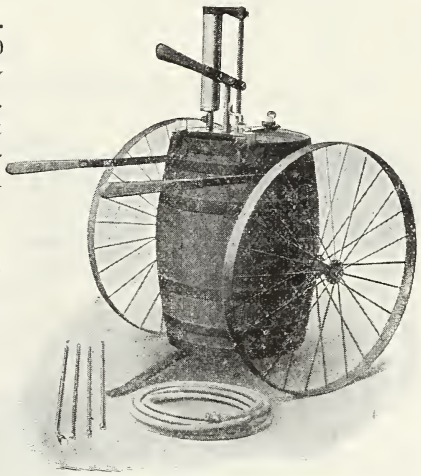
No. 1. PARAGON SPRAYER

No. "5" Capacity 50 gallons. Equipment 25 ft. 6-ply hose, 10 ft. spray pipe, one 3-way spray nozzle, 1 single spray nozzle. This Sprayer has a solid cast brass pump and large air chamber mounted in a strong barrel but not on wheels.

It is positively the very best of hand-power Sprayers made for extensive tree spraying. Net price, **$25.00.**

WE WILL MAIL ON REQUEST an illustrated Circular giving further information on Paragon Sprayers.

No. 3. PARAGON SPRAYER

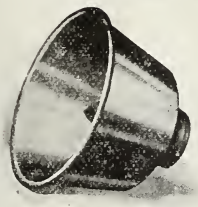


No. 4. PARAGON SPRAYER—MOUNTED

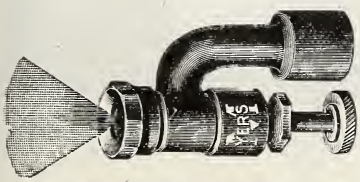
EXTRAS FOR SPRAY PUMPS.

These have universal threads and will fit any kind of pipe fitting usually used on sprayers.

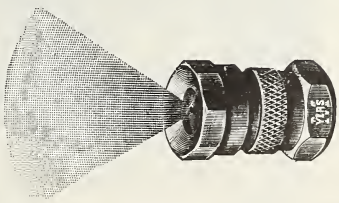
Imperial Spray Nozzle—Each, **30c.**
Bordeaux Special Spray Nozzle—The best for white washing. **75c.**
Vermorel Spray Nozzle—¼ inch pipe size, each, **60c.**
Brass Strainers for straining Insecticides. Each, **40c.**
8 ft. Extension with Coupling, each, **40c.**



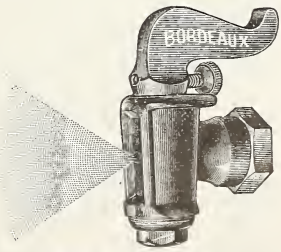
BRASS STRAINER



VERMOREL GRADUATING



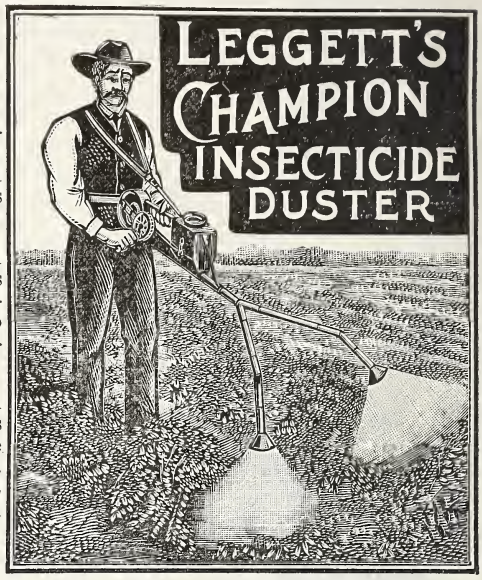
IMPERIAL



BORDEAUX SPECIAL

Dry Powder Guns and Dusters.

Leggett's Champion Dry Powder Gun.



An invaluable distributor of dry Insecticides and Fungicides in the garden, field, orchard or vineyard.

Wherever this implement is used in a section it rapidly supersedes all other methods of applying Insecticides; especially is this true in potato and tobacco sections because the work can be done so much more economically, in less time and with less waste of the material.

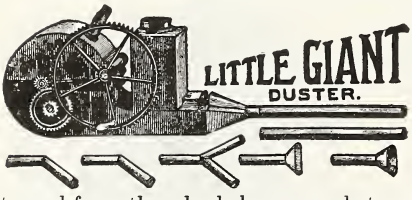
The Champion Gun has received unqualified and given general satisfaction for the past twenty years. It distributes without adulteration or reducing, dry Paris Green, London Purple, Hellebore, Arsenate of Lead, Bordeaux Mixture or Tobacco Dust and with only one-tenth of the labor, time and cost required by other methods and with far greater efficiency.

It will cover from two to four rows as fast as a man can walk. Can be easily regulated as to quantity and will do as much work in a day as a horse sprayer. Extension tubes enable the Gun to be used on fruit and shade trees and in the vineyard. Among tobacco and potato growers they have become almost indispensable, performing the work in a more perfect and rapid manner.

Circular giving full information on application.

Price, with all attachments.....**$8.00.**

Little Giant Duster.

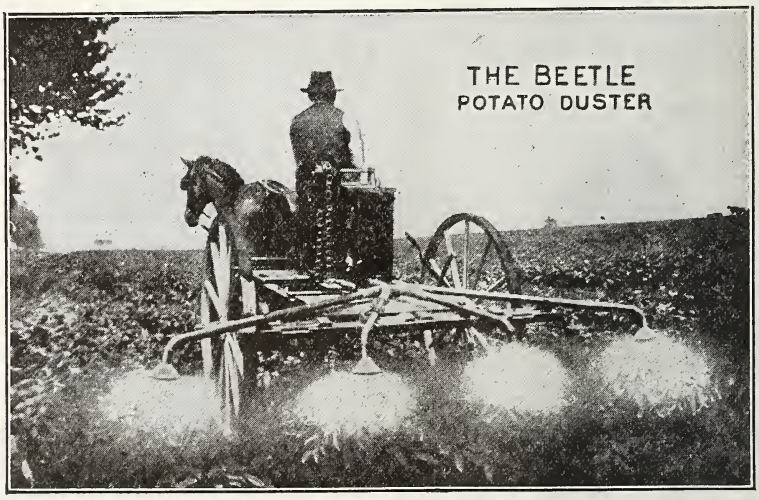


This is made on the same principle as the Champion Paris Green Gun but the capacity is smaller and there are some differences in construction. It is offered to supply the demand for a low-priced implement. It works in the same manner as the Champion with a crank. Does not have as many parts nor as much extension. Price, each.....**$6.00**

The "Beetle" Potato Duster.

This is made on the order of the Champion Paris Green Gun but is very much larger in size; is mounted on a cart and the crank is turned from the wheels by a sprocket and chain. In potato fields it covers from 4 to 16 rows at once as fast as a horse walks. The tubes and nozzles are adjustable and may be lifted over the talest potato vines or dropped so as to dust the smallest, and the flow of the powder may be increased or diminished at will and all parts operated from the driver's seat.

The advantage of applying Paris Green dry rather than in solution, is that it is dusted all through the plants both on the under foliage, as well as on the top; hence it is at once more effective, quicker to apply, besides eliminating the carrying of water and mixing. When a moderate wind is blowing the tubes of both the Beetle Duster or Champion Gun can be elevated, thus allowing the Green to be carried through many rows at once.

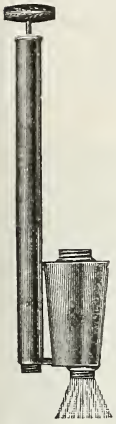


Reservoir holds about 50 lbs. of Paris Green which it will distribute very finely and it can be used for all sorts of Insecticides such as Bordeaux Mixture, Arsenate of Lead, Tobacco Dust, etc.

Will cover 30 to 40 acres per day and do the work more effectively and with less effort than any other method that we know. Price, complete.....**$70.00**

Special circular on request.

Paris Green and Bordeaux Mixture - We carry large stocks of these and will be pleased to quote special prices on request. For information as to use, see page 94.



DRY SPRAYERS, BELLOWS, ETC.

LOWELL DRY POWDER SPRAYER.

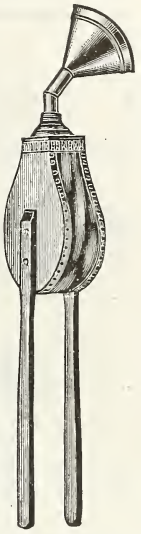
A small continuous sprayer operated on the same plan as a liquid automizer and will distribute dry powder effectively. It holds 1 qt. Price **75c.**

ACME POWDER BELLOWS.

These are very popular and used in many sections for applying Paris Green, tobacco dust and other dry Insecticides.

They are made of hardwood and good leather; have long hardwood handles. They are used like any other bellows and do fairly effective work for a moderate price implement.

The funnel is so adapted that it sprays the Insecticide and it works so as to apply above or underneath the leaves of the plant. Price, **$1.00.**



Acme Sifters.

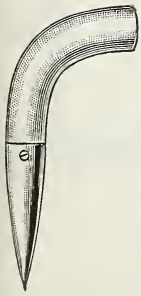
For dusting Slug-Shot, Tobacco Dust or diluted Paris Green or Arsenate of Lead on plants. It is made of sheet iron with perforated bottom; has wooden handles and an agitator which keeps the material moving. A useful implement for small gardens. Price, each **35c.**

Horticultural Tools and Sundries.

AMERICAN PLANT TUBS.

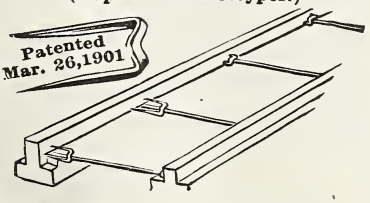
An excellent new tub, cheap, neat and durable. Made from ¾ inch Cypress, with iron handles, 3 ironhoops and 2 coats of green paint.

No. 1.	11½	inches	diameter,	11½	inches	high..... $1.00
No. 2.	13½	"	"	11¼	"	" 1.25
No. 3.	14¾	"	"	14	"	" 1.65
No. 4.	16	"	"	15	"	" 2.00
No. 5.	19	"	"	18	"	" 3.00
No. 6.	22	"	"	19½	"	" 4.00



	Each
BLUE GRASS STRIPPER, is well made and nicely painted, a man can strip 20 bushels of seed per day with it; weighs 4 pounds...	$1.50
DIBBLES for transplanting plants.....	.35
GRASS TRIMMER—Fisk & Jay.....	1.25
GUNS, INSECT POWDER—Defender.	.10
" " " Tornado..	.20
HOES—Standard Socket Garden.....	.40
" Ladies' Light Garden.....	.30
" Onion, with two prongs.....	.30
" Mehler's Handy.....	1.00
HYACINTH GLASSES—Single, assorted colors.....	.20
GLAZING POINTS (Peerless.) Best point for keeping glass from slipping. per 1000 75, 5000.....	.65

"PEERLESS" GLAZING POINT. (Improved Van Reyper.)



RAFFIA. (Natural.) For tying plants and weaving for baskets. per lb. **25c;** 5 lbs., **20c.**

RAFFIA (Colored.) For making baskets and use in fancy work. Colors; Black, Blue, Brown, Green, Orange, Pink, Red and Yellow. 2 ounces **10c;** lb., **60c.** If by mail 10c per lb. extra.

TROWELS (Ordinary Garden)—6 inch, each.....	.10
SOLID STEEL 6 inch, each	.25
FORGED STEEL, very strong, 6 inch, each **40c;** 7 inch	.50

TRANSPLANTING TROWELS.—Can be used either as a transplanter, dibble or weed digger; blade being narrow and deeply curved, 5 inch, each **10c,** 7 inch each **20c.**

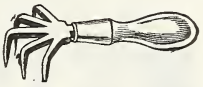
LABELS, for pots, painted 4 in., per 100, **10c;** per 1000.....	$0.75
4½ " " 100, **10c;** " 1000.....	.85
5 " " 100, **15c;** " 1000.....	1.00
6 " " 100, **20c;** " 1000.....	1.25
8 " " 100, **30c;** " 1000.....	2.00
12 " " 100, **75c;** " 1000.....	6.00

REED (Rattan)—For basket making, etc.

No.	Oz.	¼ lb.	Lb.
1.....	.12c	.40c	$1.50
2.....	.10c	.35c	1.25
3.....	.10c	.30c	1.00
5.....	.08c	.25c	.75

	Each.
RAKES—Steel Garden, 8 tooth.....	.30
" " " 10 "	.40
" " " 12 "	.45
" " " 14 "	.50
" Lawn, Wire 30 "	.50
" " Wooden20 "	.30

EXCELSIOR HAND WEEDER.



Excellent for use in flower gardens, price 15c; (by mail 20c.)

SCOLLAYS' PUTTY BULB.—For applying liquid putty on sash. Each **$1.00.**

SCOLLAY'S SPRINKLERS—For spraying cut flowers and used in the house for watering and spraying house plants. Standard size, each **$1.00.**

SCYTHE STONES Flat 5c; Round.....	.10
SEED TRYERS—Steel-pointed, pocket, nickel-plated with cap.....	1.00
SEED TRYERS—Large. For sampling Orchard Grass, Blue Grass, Coffee, etc.....	1.50

Forged Trowel.

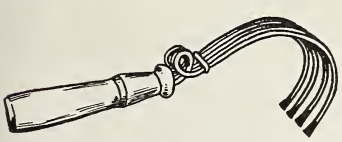
Transplanting Trowel.

MAGIC WEEDERS.

MAGIC WEEDER—One of the best hand tools, saving time and labor. It is made in different styles as shown by the cuts and can be used both for cutting and digging out weeds, as well as for making rows, if desired.

	Each.
No. 0. 3 tine.....	$0.10
No. 1. 4 "	.15
No. 2. 4 " with hoe.....	.25
No. 2V. 4 " " point.....	.25

No. 0.



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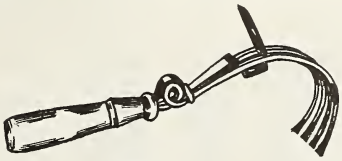

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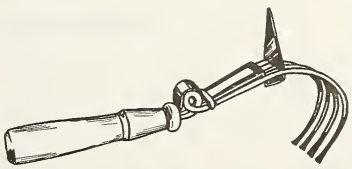
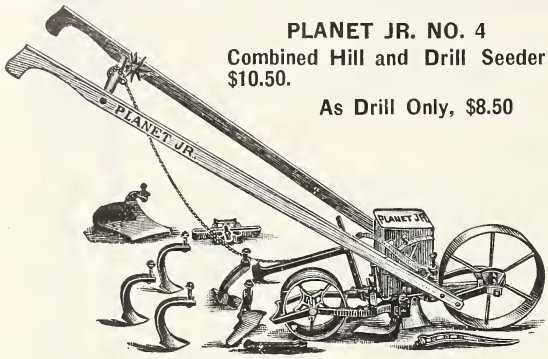


No. 2-V.

PLANET JR. TOOLS.

Complete illustrated catalogue on request.
Our net prices are less than Planet Jr. Catalogue Prices.



PLANET JR. NO. 4
Combined Hill and Drill Seeder $10.50.
As Drill Only, $8.50

PLANET JR. WHEEL HOES.

No. 11. DOUBLE WHEEL HOE.—2 6-inch hoes, 2 4½-inch hoes, 4 cultivating teeth, 2 plows, 4 rakes, 2 leaf lifters. Our net price.....$8.50

No. 12. DOUBLE WHEEL HOE.—Has 8 cultivating teeth and weeding tools. Our net price complete.....$6.50

No. 13. DOUBLE WHEEL HOE.—2 weeding hoes, only. Our net price.....$4.35

No. 14. DOUBLE WHEEL DISC HOE.—Has two gages of 3 discs, 2, 3 prong cultivating teeth and 2 plows. Our net price..$7.50

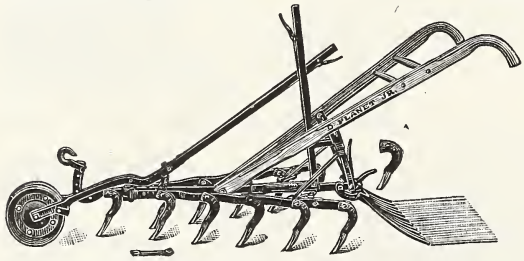
No.16. SINGLE WHEEL HOE.—Has 7 cultivating teeth a garden plow. Our net price.....$5.35

No. 17. SINGLE WHEEL HOE.—Has 6 weeding and cultivating teeth. Our net price.....$4.75

No. 17½. SINGLE WHEEL HOE AND CULTIVATOR, teeth and leaf lifter. Our net price.....$4.25

FIRE FLY GARDEN PLOW.—A tool for small gardens. It will throw a furrow 4 to 6 inches wide. Our net price.....$2.25

FARMERS No. 19, SINGLE WHEEL HOE CULTIVATOR AND PLOW. Our net price.....$3.65

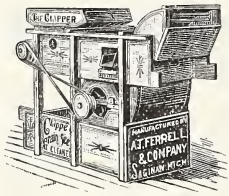


TWELVE-TOOTH HARROW, with wheel, without pulverizer, Our net price.....$7.15

TWELVE-TOOTH HARROW plain, without pulverizer and wheel Our net price.....$5.70

TWELVE TOOTH HARROW, with lever wheel and pulverizer, complete. Our net price.....$8.75

CLIPPER SEED AND GRAIN MILLS.



These mills are especially adapted for cleaning grain, clover and timothy seed. **No. 1 for grain and clover $20.00.** Descriptive circulars and prices for larger sizes for either hand or power, sent on application.

MOSHER BAG HOLDER.

Best on the market. With stand. Price $3.50.

HILL AND DRILL SEEDERS.

No. 4. COMBINED HILL AND DRILL SEEDER., with 2 hoes, 3 cultivating teeth and plow, as shown. Hopper holds 3 pints. Our net price complete.....$10.50
As a seeder without tools, out net price..... 8.50

No. 3. HILL AND DRILL SEEDER—without cultivating tools hopper holds 3 quarts, our net price $10.00

No. 6. PLANET JR. HILL AND DRILL SEEDER, WHEEL, HOE, CULTIVATOR AND PLOW COMBINED. Has 6 cultivating teeth; hopper can be removed and the machine used as a cultivating tool. Our net price complete with tools. $13.00

HILL AND DRILL SEEDER, only..... 10.50

No. 25. HILL AND DRILL SEEDER COMBINED, DOUBLE WHEEL HOE, CULTIVATOR AND PLOW. Has 8 cultivating tools. Our net price complete.....$13.00

No. 11 Planet Jr. Double Wheel Hoe, Cultivator, Plow and Rake Complete as shown with 14 Tools, $8.50

No. 12 has no Rakes and only 2 Hoes, Price, $6.50.

Steel Frames

PLANET JR. HORSE TOOLS.

No. 8. HORSE HOE AND CULTIVATOR, with 4 cultivating teeth, 2 side hoes, one 7 inch shovel with wheel. Our net price$8.50

No. 9. HORSE HOE, with all attachments complete. Our net price with wheel.....$7.25

No. 9. PLAIN CULTIVATOR, expanding lever, 5 teeth, fitted with 1¼ inch steels.. Without wheel, Our net price..... $5.50

No. 4. PLAIN CULTIVATOR. 5 teeth, 1¼ inch steels, without wheel. Our net price.....$4.25

THE DETROIT GRAIN BAG HOLDER.

Saves More Time, More Labor and More Money for the farmer in proportion to its cost than any implement ever invented for his use.

It has no hooks to tear the bag.

It is not necessary to remove it to sack down.

It is easily attached to the bag and will not get out of order.

It is perfect in its adjustment.

No one who handles grain can afford to be without it.

Price, **25c** each. **$2.50** dozen.

STANDARD FLOWER POTS AND SAUCERS.

FLOWER POTS.

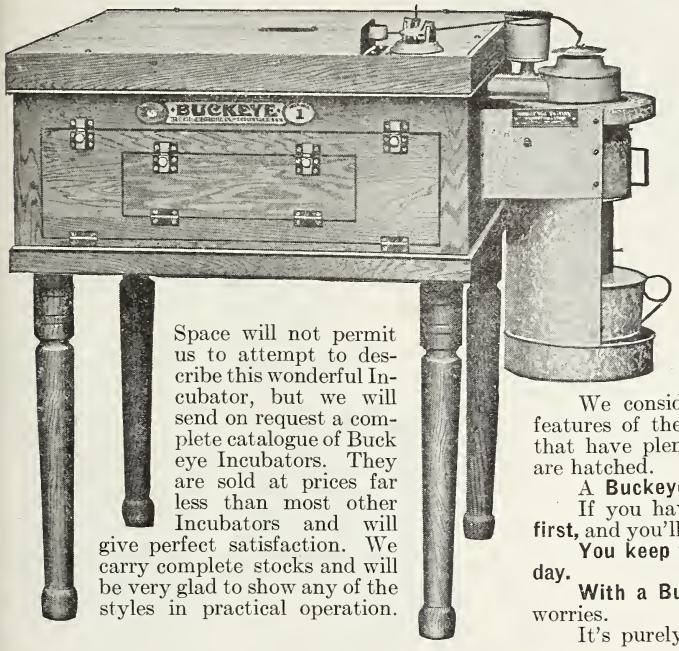
	Each.	Doz.	100
2 inch	$0.02	$0.15	$0.80
3 inch	.03	.25	1.25
4 inch	.04	.30	2.00
5 inch	.05	.40	3.00
6 inch	.06	.60	4.50
7 inch	.08	.90	7.00
8 inch	.12	1.25	9.00
9 inch	.15	1.75	14.00
10 inch	.25	2.50	.....
12 inch	.40	4.50	.....

SAUCERS.

	Each.	Doz.
4 inch	$0.03	$0.25
5 inch	.03	.30
6 inch	.05	.40
7 inch	.05	.50
8 inch	.07	.70
9 inch	.10	.90
10 inch	.12	1.00
12 inch	.15	1.50

BUCKEYE INCUBATORS.

COMPLETE CATALOGUE MAILED FREE ON REQUEST.



Space will not permit us to attempt to describe this wonderful Incubator, but we will send on request a complete catalogue of Buck eye Incubators. They are sold at prices far less than most other Incubators and will give perfect satisfaction. We carry complete stocks and will be very glad to show any of the styles in practical operation.

Sold on 40 days trial, with a guarantee to hatch every hatchable egg.

The Buckeye is constructed on rational and scientific principles and contains the most improved heating apparatus, patented thermostat and Self-Regulator devices, and for 21 days the temperature never changes more than a degree either way.

If you already have incubators, we want you to try a **Buckeye** and see how much better it is than any incubator you have ever used.

Learn how many more eggs you can hatch with a **Buckeye.**

Note the difference in the size and strength of the Chicks when they are hatched!

We consider this point one of the most important features of the **Buckeye,** as the **profitable** chicks are those that have plenty of size, vitality and vigor when they are hatched.

A **Buckeye** incubator will hatch every hatchable egg.

If you have never used an incubator, **try a Buckeye first,** and you'll save money, time and trouble.

You keep the lamp burning and turn the eggs twice a day.

With a Buckeye you have no ventilation or moisture worries.

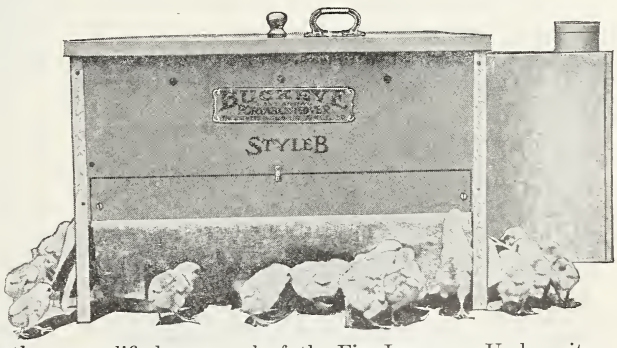
It's purely automatic and **you can't make a mistake.**

1915 PRICES.

				Price
Style E	Capacity	60	Eggs	$ 7.50
Style H	"	60	"	10.00
Standard No. 60	"	60	"	14.00
No. 1 Standard	"	110	"	18.00
No. 2 "	"	175	"	23.00
No. 3 "	"	250	"	30.00
No. 4 "	"	350	"	35.00
No. 5 Mammoth Standard	"	600	"	56.00

All "Standard" Incubators bear **Fire Underwriters label.**

BUCKEYE KANT-KROWD KLOSE-KONTACT FRESH AIR BROODERS.



The only perfect **Artificial Mother** ever invented.

Constructed after Nature's own plan. With all the safeguards for the little chicks that human ingenuity can possibly devise. It is the only Brooder ever invented that completely safeguards the chicks regardless of the operator's carelessness, or the foolish inclinations of the chicks.

Fire Proof and **Insurable.** Because they are heated by a hot-water system that has the unqualified approval of the Fire Insurance Underwriters, and every brooder bears the Underwriters' "Inspected Brooder" Label. Complete catalogue on request.

INDOOR TYPE.

No. 7, Capacity 75 Chicks	$12.50
No. 8, Capacity 150 Chicks	17.50

OUTDOOR HEATED TYPE.

No. 9, Capacity 75 Chicks	$16.00
No. 10, Capacity 150 Chicks	22.50
Portable Hovers, Capacity 150 Chicks	12.00

BUCKEYE COLONY HOUSE.

Made of one inch flooring throughout, all tongued and grooved together; a perfect weather proof shelter. Size, 6 feet long, 3 feet deep, 3 feet high, weight, crated for shipment 280 pounds.

Complete, with floor and roosts, **$14.00.**

POULTRY APPLIANCES.

"6 IN 1" EXERCISER FEEDER—It has all the good features of other exercisers and feeders, plus 5 additional compartments.

Specifically, it is a large hopper supported on 4 strong iron legs and designed to keep constantly before chickens all the food necessary for them. The user of a "6 in 1" can place it in his hen house, fill it and then go away for several days without misgivings about the feeding of his flock. The "6 in 1" will attend to that.

The ordinary exerciser and feeder has one compartment containing mixed grains. The "6 in 1" has this central compartment, and in addition has 5 others—for dry mash, meat, oyster shell, grit and charcoal.

Connected with the central hopper (that for mixed grains), is an agitator, loaded with whole corn as bait. When the fowls pick at the bait, a small quantity of the mixed grain falls on the deflector, and is scattered widely in the litter on the floor. Scratching vigorously for the grains, the hens get just the exercise they need.

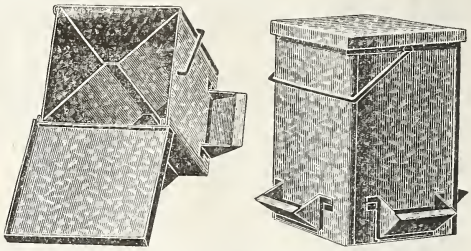
The body of the "6 in 1" can be lifted from the legs and placed on the floor, in which position it makes a perfect chick feeder.

The "6 in 1" comes pretty near to being a downright necessity to the poultryman. With it in his hen house he can be sure that his fowls will exercise, which means vigor, and eat a balanced ration, which means eggs.

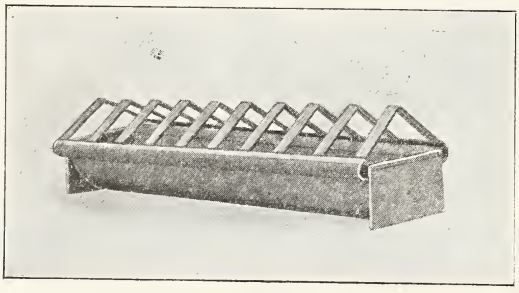
The top of the "6 in 1" is conical in shape. The fowls positively cannot roost upon it.

PRICES: 20 Quart Size.....**$3.75**
40 Quart Size.....**4.75**

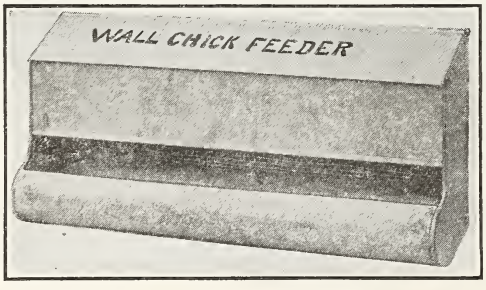
"4 IN 1" AUTOMATIC SANITARY FEEDER—Constructed so that the chickens cannot waste any feed, neither can it be clogged. The feed is forced down through the opening in the sides into small troughs by the cone-shaped bottom, which allows only a small amount at a time. No feed can be scratched out. Size 7¼ inches by 7¼ inches by 11 inches high. Made of galvanized iron, and collapsible. Price, **75c.**



UP TO DATE SANITARY BROODER COOP—The most successful coop on the market, being sanitary, ventilated at the top and ends; has 3 doors, one wire screen door, one slatted door which allows the little chickens to pass in and out, and one storm door to close in case of rain. These work on a pivot and cannot be forced open by the hen. Size 18 inches high, 18 inches wide, 24 inches long. Price, **$1.50.**

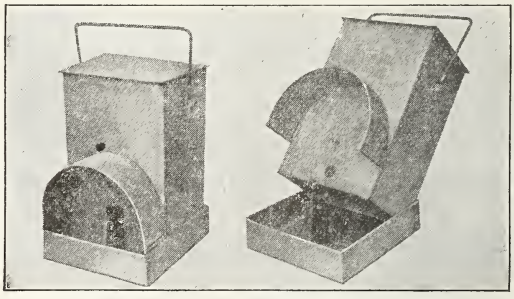


CHICK TROUGH—Chicks can not get into it to dirty the food. The top removes to fill or clean. Is very little trouble. No expense and no danger. Price, small, 10 in. **25c;** medium, 20 in. **50c;** large, 30 in. **75c.**



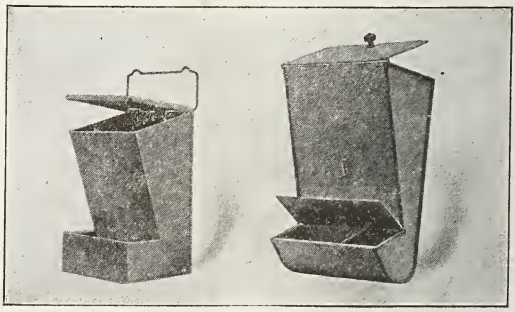
GRIT AND SHELL BOX—This box is made of heavy galvanized iron, with three compartments, for grit, oyster shell and charcoal or beef scrap. It is provided with a cover or lid, which protects the contents. The box may be suspended on the wall of the poultry building by the handle. Prices: Round bottom, **50c;** Rectangular bottom, **40c.**

WALL CHICK FEEDER—The best device made for feeding Dry Mash, Little Chick Grains, Grits, Charcoal, etc., to Baby Chicks. Price, 10 in., **50c;** 20 in., **75c.**



SQUARE BOTTOM DRINKING FOUNTAIN—Made of heavy Galvanized Iron. Easy to clean. Prevents disease. Prices: 2 qts., **45c;** 1 gal., **60c;** 2 gal., **80c.**

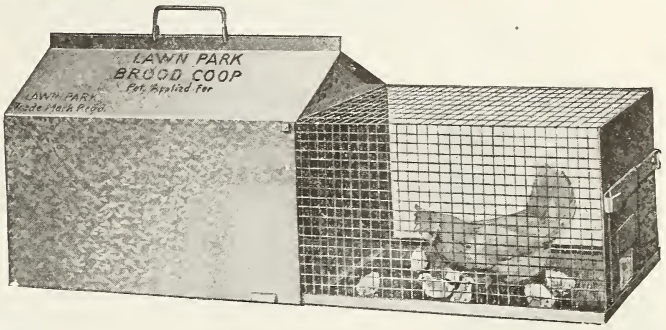
TWO PIECE GALVANIZED DRINKING FOUNTAIN—The chicks can not get into the basin to foul the water nor to drown, and will not roost on the top. They are easily cleaned, are light and durable, and will not freeze and burst in winter. Prices: 1 qt., **20c;** 2 qt., **25c;** 1 gal., **40c.**



POULTRY APPLIANCES.

"LAWN PARK" COOP.
It Telescopes.

Gives the chicks sunshine, fresh air, grass and protection from all enemies. Made of galvanized metal. Sanitary, repelling lice and mites. Size closed 18 by 24 inches. Extended 18 by 48. Height 24 inches. Price each, **$2.50.**



DRY FOOD HOPPERS.

Made of heavy galvanized iron, well seamed and will last a long time. These are not cheaply constructed Hoppers, but are made for long durable wear. Each, **75c.**

MEAT SCRAP AND BRAN HOPPER.

Has capacity of about 10 quarts and is adapted for feeding grain, beef scraps, bran, etc. Weight 2 lbs. Made of galvanized iron; round bottom.

Price, 50c.

CELLULOID LEG BANDS
DURABLE AND PRACTICAL

They mark your poultry so that you instantly know without handling, individual birds, one mating from another, and pullets from hens.

Bands for Full-Grown Poultry.

Made in seven colors—Red, White, Blue, Pink, Amber, Black and Ruby. Prices: 12 for **25c;** 25 for **50c;** 50 for **85c;** 100 for **$1.50.**

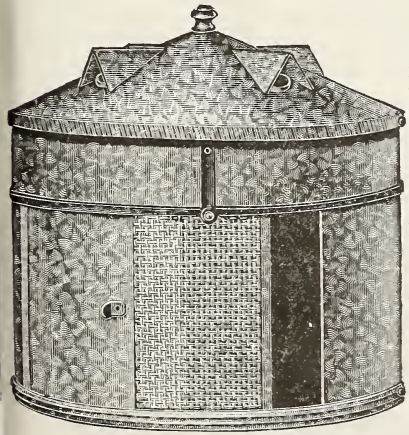
Bands for Half-Grown Chicks

Made in five colors—Red, Blue, Pink, Amber and Black. Prices: 12 for **25c;** 25 for **40c;** 50 for **75c;** 100 for **$1.25.**

LEADER ADJUSTABLE LEG BANDS.

Neatest, smoothest and most secure fastening of any adjustable band on the market. No. 1 size for Bantams and Leghorns. No. 2 size for all larger breeds and Turkeys. **15c** per doz.; 25 for **30c;** 50 for **50c;** 100 for **75c.**

BURLINGTON BROOD COOP.



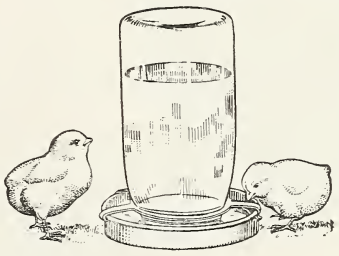
Round metal coop, made of galvanized iron, with sliding door, which can be fastened open at desired size. Adjustable top for ventilation. Rat, mink, weazel, mite and rain proof. Size 20 in. diameter, 20 in. high. Each, **$1.50;** doz., **$16.00.**

SANITARY STONEWARE FOUNTAIN.

The top is removable, allowing the fount to be thoroughly cleaned inside. The proper thing to use where medicine is given in the drinking water. 1 qt., **20c** each; **$2.00** doz. 2 qt., **25c** each; **$2.50** doz.

RECTANGULAR GRIT AND SHELL BOX—One of the most rationally constructed boxes; remains in upright position; has partitions. Each, **50c.**

N. W. AUTOMATIC FEEDER AND FOUNTAIN.



Made to fit any half gallon, quart or pint Mason jar. We do not furnish jars.

Two Sizes:

No. 5, having 5 inch pan, **10c** each; 3 for **25c.**

No. 6, having 6 inch pan, **15c** each, 2 for **25c.**

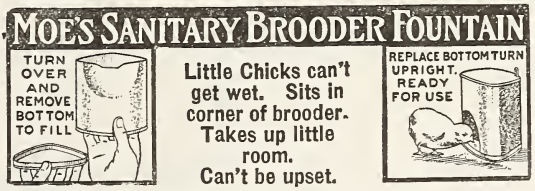
SANITARY WALL FOUNTAIN.

A two piece fountain, non-rusting and keeps the water sanitary. Holds 1 gal. Price each, **50c.**

FEED AND WATER TROUGHS.

Oblong with ridged bands. The grid or bands will slide off so that the trough can be easily cleaned. 10 inches each **25c;** 20 inches, each, **50c;** 30 inches, each, **75c.**

CHICK FEEDERS—Box bottom and front of trough all one piece. Prevents the food from moulding, and feeds enough without waste. Size 5 inches long, 6 inches high. Each, **25c.**



If desired can be hung up by hook which is on top of each fountain.

No. 0, one quart capacity $0.25

INCUBATOR THERMOMETERS—Best quality made; each thermometer thoroughly tested before sold. Each, **75c.**

BROODER THERMOMETER—Thoroughly tested before sold. Each, **75c.**

Stock and Poultry Supplies

CONKEY'S POULTRY REMEDIES.

Conkey's Laying Tonic is a result of careful study and experiment, and is a compound of vegetable extracts, herbs, roots, etc., so proportioned as to act gently on the egg-producing organs to remove any irregularity which may exist, and to invigorate and tone the system to a point only that is perfectly natural in the highest state of the vigor and health of the fowl.

Conkey's Cholera Remedy, 25c and **50c** per pkg.
Conkey's White Diarrhoea Remedy, 50c per package.
Conkey's Roup Remedy, 25c, 50c and **$1.00** per package.
Conkey's Poultry Tonic, 25c per package.
Conkey's Poultry Laxative, 25c per package.
Conkey's Laying Tonic, 1½ lb. package, **25c**; 3¼ lb. package, **50c.**
Conkey's Lice Powder, 5 oz. package, **10c**; 15 oz. package, **25c.**
Conkey's Lice Liquid, 1 qt., **35c**; 2 qts., **60c.**
Conkey's Gape Remedy, 50c per package.
Conkey's Head Lice Ointment, 1 oz. tube, **10c**; 3 oz. tube, **25c.**
Conkey's Limber Neck Remedy, 50c per package.
Conkey's Nox-i-cide, small size, **35c**; 1 qt., **60c.**
Conkey's Poultry Worm Remedy, 50c per package.
Conkey's Chicken Pox, (Sorehead) remedy, **50c** per package.
Conkey's Rheumatic Remedy, 50c per package.
Conkey's Bronchitis Remedy, 50c per package.
Conkey's Scaly Leg Remedy, 25c per package.
Conkey's Sulphur Fumigating Candles, 10c each, 3 for **25c.**
Conkey's Distemper Remedy, 50c.
Conkey's Mange Remedy, 50c.
Conkey's Hoof Remedy 1 pint, **50c**; 1 quart, **75c.**

RUST'S POULTRY REMEDIES.

Reliable and well-known preparations which have been on the market for many years.

Rust's Egg Producer—One of the best producers for mixing with wet feeds. Will increase egg production where others fail. 1 lb. 25c.

Rust's Havens Climax Powder—For Fowl-Cholera, Gaps and all other Poultry diseases, besides animal diseases. It is a fine condition powder. 13 oz. box, 25c.

Rust's Haven Roup Pills—For Fowls and Pigeons. Box (50 pills), 25c.

Rust's Liquid Lice Killer—Quart can, 35c.

Rust's Lice-Killing Powder—For dusting Fowls and Nests, 5 oz box, 10c; 16 oz. box, 25c.

Lee's Head Lice Ointment—Per box, 15c.

INTERNATIONAL FOOD CO. PRODCTS.

Well known and well advertised goods.

International Poultry Food, 25c.
International Stock Food, 25c and 50c boxes.
International Worm Powder, 50c.
International Heave Cure, 50c.
International Gall Cure, 25c.
Silver Pine Healing Oil, 25c.

LEE'S REMEDIES.

Lee's Lice Killer—1 gal. $1.00; ½ gal. 60c; ¼ gal. 35c.

Germozone—12-ounce bottles, 50c each or in boxes of 60 tablets (same value, for mailing) at same price.

Lee's White Diarrhoea Remedy—12 oz. bottles 50c.

Lee's Egg Maker—5½ lb. pkg., 50c; 2½ lb. pkg., 25c.

Lee's Insect Destroyer—A powder put up on 1¼ pound sprinkler-top cans, very convenient for use. Price, 25c. Postpaid for 40c.

SPRATT'S FOOD FOR DOGS.

Spratt's Patent Dog Cakes, per pkg .....10c. Large size 25c
Spratt's Patent Puppy Cakes, per pkg.. ....10c. Large size 25c

Standard Poultry Foods

We carry one of the largest stocks of all kinds of Poultry supplies in this city. Most foods we make ourselves and are in a position to sell as low as anyone. Large buyers will please get special prices.

J. C. McC. Poultry Food—A perfectly balanced ration of grain without grit, shell or other adulterants. 10 lbs., 25c; 100 lbs., $2.25.

"Bell Poultry Food". A combination of grain and seed and screenings, grit and shell. 100 lbs., $1.75.

J. C. McC. Chick Feed—A perfectly balanced ration of grain and seeds for young chicks. 10 lbs., 25c; 100 lbs., $2.25.

Alfalfa Meal, choice .....3 lbs. 15c.	.....6 lbs.	$ 25	Buckwheat, recleaned	.....4 lbs. 15	8 lbs. 25
High Protein Meat Scraps	.....6 lbs.	25	Chicken Wheat	.....5 lbs. 15	10 lbs. 30
Beef Meal	.....6 lbs.	25	Feed Barley	.....4 lbs. 15	8 lbs. 25
Kaffir Corn, white recleaned 4 lbs. 15c	.....8 lbs.	25	Chicken Millet		8 lbs. 25
Sunflower Seed, recleaned	.....2 lbs. 25	10 lbs. 1.00	Oats	.....5 lbs. 15	10 lbs. 25
Cracked Corn	.....5 lbs. 15	10 lbs. 25	Linseed or Oil Meal	.....4 lbs. 15	8 lbs. 25
Bran	.....5 lbs. 15	10 lbs. 25	Cotton Seed Meal	.....5 lbs. 15	10 lbs. 25
Whole Corn, shelled	.....6 lbs. 15	12 lbs. 25	Granulated Bone	.....6 lbs. 25	13 lbs. 50
			Charcoal	.....3 lbs. 10	8 lbs. 25
			Oyster Shells	.....6 lbs. 10	50 lbs. 45
			Mica Crystal Grit	.....6 lbs. 10	5p lbs. 45
			Poultry Mash	.....5 lbs. 15	10 lbs. 25
			Chick Chowder	.....8 lbs. 25	100 lbs. $2.50

RYDE'S CREAM CALF MEAL.

A complete rationally based feed for producing the finest calves without the use of milk. It is the one economical and completely balanced food affording all elements necessary to produce muscles, bones, frame, and to put flesh on the animal at the same time giving that tone of health which is developed by a good appetite and regular natural movements.

Ryde's Cream Calf Meal costs less to feed, three calves being raised for the price of one on whole milk. It is fine also for colts, pigs and lambs. Descriptive circular on request.

Prices, 25 lb. bag, **$1.00**; 50 lbs., **$1.75**; 100 lbs., **$3.25**; 1000 lb. lots and over, **$3.00** per 100.

Quantity	ARTICLES WANTED	Amount	
	Amount brought forward		
	Total Amount		

Send us names of some of your friends and neighbors who buy Seeds, etc., and we will include a few Flower Seeds for your kindness.

NAMES	ADDRESS	

NO. GOODS SENT C.O.D.

ORDER SHEET
For Vegetable and Flower Seeds

THE J. CHAS. McCULLOUGH SEED CO.

228-230-232 East Fourth St. **Cincinnati, O.**

Date_____ Amount Enclosed_____

Name_____ If Lady, state whether Miss or Mrs.

Post Office_____ R. F. D._____

Shipping Depot_____ Railroad_____

County_____ State_____

Send order by_____ on or about_____

State whether Mail, Express or Freight

☞We, THE J. CHAS. McCULLOUGH SEED CO., give no warranty, express or implied, as to description, quality, productiveness or any other matter of any seeds, bulbs or plants We send out and We will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms, they are at once to be returned, and the amount paid will be refunded. If they are kept it will be taken as proof that they are satisfactory.

THE J. CHAS. McCULLOUGH SEED CO.

Quantity	Catalog Number	VEGETABLE AND FLOWER SEEDS Fill in Names here if desired	Amount	
		Amount carried forward		

DON'T FORGET POSTAGE ON BULK SEEDS BY MAIL.

S Indicates Seeds
B " Bulbs

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P " Plants

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